

THE BRIDGE GOLF FOUNDATION

VISION DOCUMENT



Cover Photo:
"Minstral Bouquet" by Charles McGill





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**“All I ever wanted to do
was play the game.”**

-Charlie Sifford

Introduction

The Bridge Golf Foundation is designing an expansion to extend the Foundation's success by providing spaces to foster positive learning experiences to support STEM-based, project-based activities to fulfill its mission. The center will continue its work to promote school readiness and achievement, college and career success centered around the game of golf. The expansion will also increase the center's reach into the community offering programs, activities and community events for families and youth in Harlem and across New York City to enjoy.

The Bridge Golf Foundation has engaged Margaret Sullivan Studio, G TECTS (Gordon Kipping) and Allison Milgrom to create the programmatic and design concept and oversee the proposed design and construction.

This document is the Program Vision, the first phase of the project. This will be shared with board, staff and stakeholders for feedback and consensus. The Concept Design, including interior design development and furniture selection will be completed in the next phase. Construction documents will be issued May 2018. Construction is expected to commence in Summer 2018. The expansion will open to the public in Fall 2018.

The Program Vision reflects the work of two consultants: Margaret Sullivan Studio and Allison Milgrom. Margaret Sullivan leads a nationally-recognized design firm with expertise in designing community-centric, education-centric and outcomes-based interiors for public institutions nationwide. The Studio has also been recognized for design excellence with national interior design awards. In 2017, the Studio was named one of Interior Design

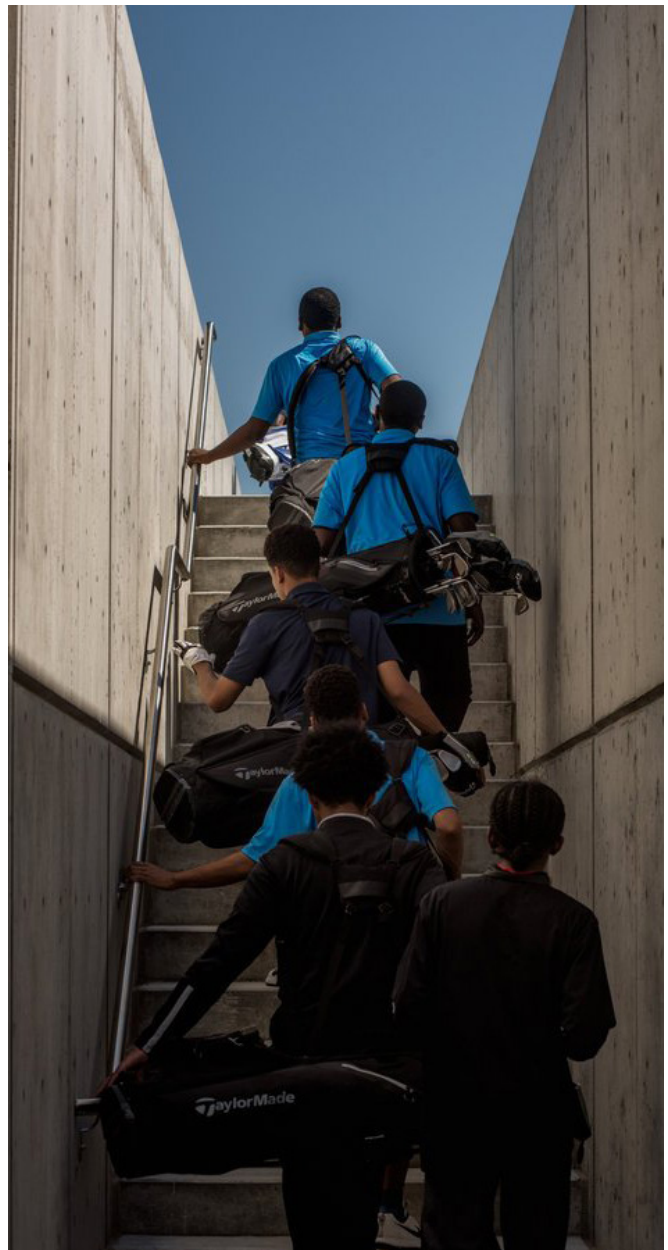


Credit: Johnny Milano for The New York Times

Magazine's Rising Stars. The Foundation's Annex space will be designed with characteristics of the Studio's most successful projects that fulfill a similar mission, including DreamYard Art Center in the Bronx, CLOUD901 Teen Learning Lab in Memphis, TN, and the Learning Lab for the New Victory Theater in Times Square.

Allison Milgrom is a leading consultant in assisting educational institutions in developing successful revenue-generating community-based curriculum for STEM-based, project-based learning. With a background in science, technology, design and education, Allison's expertise has been employed to create an expanded schedule for current and future Bridge Golf Foundation Annex participants.

The following document representing the Program Vision will enable an expanded and meaningful impact for the community that The Bridge Golf Foundation serves!



Credit: Johnny Milano for The New York Times

Project Schedule

DATES	RESPONSIBLE PARTY	PHASE/TASK
JANUARY 1 - FEBRUARY 15	MSS	PROGRAMMING, VISIONING, CONCEPTUAL DESIGN PHASE
	G TECTS	SCHEMATIC DESIGN PHASE
FEBRUARY 15 - MARCH 15	MSS	INTERIORS DEVELOPMENT PHASE
	G TECTS	CONSTRUCTION DOCUMENTS PHASE I (ISSUED FOR LANDLORD APPROVAL - MARCH 1)
MARCH 15 - MARCH 31	MSS	FURNITURE & FIXTURES PHASE I
	G TECTS	CONSTRUCTION DOCUMENTS PHASE II
APRIL 1 - APRIL 30	MSS	FURNITURE & FIXTURES PHASE II
	G TECTS	BIDDING & NEGOTIATION WITH CONTRACTORS (ISSUED FOR BUILDING PERMIT - APRIL 1; ISSUED FOR BID - APRIL 1)
MAY 1 - AUGUST 30	MSS & G TECTS	CONSTRUCTION ADMINISTRATION PHASE



“If you are given a chance to be a role model, I think you should always take it because you can influence a person’s life in a positive light, and that’s what I want to do. That’s what it’s all about.”

-TIGER WOODS

Vision Statement

Since its founding in 2015, The Bridge Golf Foundation has used the game of golf as a vehicle to improve life outcomes for young men of color by blending golf with STEM, mentoring and character education to close gaps in achievement, learning and opportunity. The Bridge Golf Learning Center, a 2,400 square foot, state-of-the-art indoor facility opened in Harlem in May 2016.

The afterschool, STEM-based programs include science experiments, woodworking, digital fabricating, and many more engaging lessons and activities. However, the space was designed primarily for simulated golf and not to support the complex needs of the amazing activities these youth are engaging in at the center. As a result, skills and talents related to the extraordinary STEM-centered, project-based learning and character education the boys are already doing cannot be fully developed because the space is not designed to accommodate this learning.

The Bridge Golf Foundation is designing a space adjacent to the Learning Center that will be a visible storefront, active learning environment for the young men in the afterschool program, as well as be open days and weekends for the entire community. The extension will provide space for the complete STEM-centered learning cycle to be met for all of the youth's passions, interests, aspirations and goals. Focusing on the game of golf as the platform for learning, the space will be designed around a series of "Academies," providing individuals access to tools, technologies and talents to enable passions and develop 21st century skill sets. These will include: photography, videography and editing; maker workshops; new media and journalism; viewing and performance; gaming, design and development; coding; music and audio production; and visual design and illustration.

The space design and opportunities to improve programming will result in college and career



Credit: Johnny Milano for The New York Times

readiness by providing opportunities for 21st century skill sets to flourish and places for mentoring, character education and service learning. Additionally, because many colleges are requesting portfolios, youth will have the access to tools to create high tech and media-produced portfolios with expanded content to include in their college applications.

It will also be adaptable and flexible for a variety of activities throughout the day. With the space extension, The Bridge Golf Foundation will be able to offer STEM programs to the community, extending impact exponentially. It will generate pride of place for Harlem residents, for youth in the program, and for donors and supporters.

It will also be designed to be scale-able. The design approach will be based around best practices, replicable for a larger space or another, national

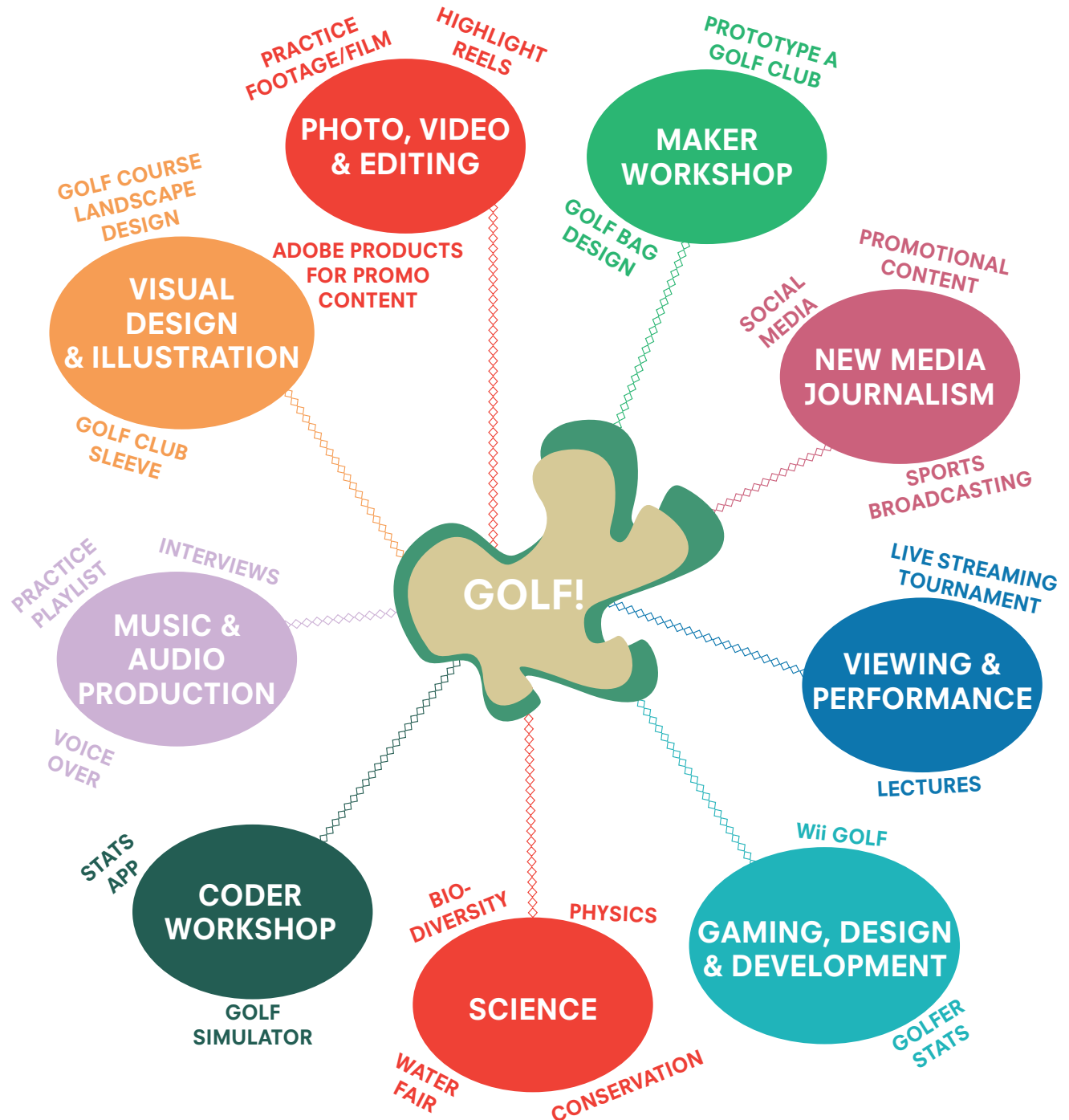
location. The expansion will also allow the Foundation to increase the number of young men that it serves. Presently, the afterschool program serves 20 young men who receive programming in golf, STEM, character education, college and career readiness and mentoring in a 2,400 square foot space. However, this expansion will have the capacity to serve 50 young men at one time over a three hour period.

This community facility will be the first of its kind in New York City to promote project-based, interest-based learning intentionally designed to foster 21st century skill sets, critical for success in this 21st century knowledge economy. It will rival facilities like the Tiger Woods Learning Center and other national leaders in STEM-focused learning, afterschool education and expanded learning.



Credit: Johnny Milano for The New York Times

Vision Diagram



Character Education

Self-control

Controlling your actions, thoughts, and feelings so they align with your goals

Grit

Passion and perseverance for long-term goals

Curiosity

Wanting to learn more. Showing interest, seeking novelty, and being open to new experiences

Growth Mindset

Believing we can get smarter through hard work and good strategies

Gratitude

Appreciating what others have done for us, and feeling moved to reciprocate

Purpose

Contributing to the well-being of others

CHARACTER

STRENGTHS!

Zest

Finding and sharing joy in what you do



College & Career Readiness



**“If I ever get bored with
golf, I’m going to start over
and play left-handed.”**

-MICHELLE WIE

The Business Plan

With a goal of maximizing the usage of the space, this schedule proposes 89 hours of programming per week with a mixture of classes, professional programs and community programs that reinforce our mission through project-based learning and the game of golf. STEM programs in other parts of New York City are in high demand and are expanding rapidly, but none offer the unique programming of the Learning Annex all under one roof. A sample week of programming is shown for Monday through

Sunday from 8am to 9pm each day. Regular class tuition ranges from \$20 for a Minecraft Club to \$50 for a Family Robot Club. Fees for professional programs, including team building and professional development are \$60 per person. Special events such as birthday parties command higher revenues. To promote inclusion community programs are a more modest \$5 to \$15. These prices are informed by research on similar existing profitable programs in adjacent neighborhoods.



Credit: Johnny Milano for The New York Times

STEM learning is the anchor of the afterschool curriculum, emphasizing 21st century skills and college and career readiness. Students engage in collaborative projects where they gain transferable skills, such as communication and critical thinking skills, and develop a sense of civic responsibility. In our Golf Lab we can run three simultaneous activities with thirty boys split into three groups. Sample activity stations include coding a golf game, designing a golf course, and learning the physics of swinging a club. The after school program will not only train boys to develop workforce skills, but also prepare them to mentor and teach younger students through our Youthworks program. The boys will have opportunities to showcase their projects to the larger community and assist teachers in our for-profit programs.

The Learning Annex will also provide fee-based programming for all ages that connects science and math with golf. Programming will align with and reinforce the afterschool, project-based curriculum. Classes will target the following groups: Tinkering Tots up to age 3, Young Makers ages 4-6, Elementary Engineers ages 5-10, Learn to Code for ages 8-11, Web Design and App Development for ages 12-18, families, girls and adults. The same Golf Lab programming can run in for-profit programs. For example, a father and son can learn how to 3D print a golf club in one of these classes.

If minimum desired class sizes are met for all programs, projected weekly revenue is approximately \$15,000 with an estimated profit of \$6,650 after staff, materials, and estimated monthly overhead of \$15,000. Achieving the high targets of class size would generate weekly profit of nearly \$25,000 on revenue of \$35,000, with larger classes in most cases requiring more staff at an average estimated doubled

cost per week. These projections all assume one class per time slot. Dividing the larger space into two classroom spaces would allow for two simultaneous classes with as much as 100% incremental revenue.

The hiring plan includes a Program Manager and the existing digital media provider to build a website. The Program Manager will arrange for training of existing staff and will hire guest instructors. Current afterschool staff can serve as for-profit center staff as well, but the assumed one staff member per class increases to two if class sizes reach higher enrollments.



Credit: Johnny Milano for The New York Times

Program Manager Job Description

The Program Manager is responsible for the development and delivery of STEM (Science, Technology, Engineering, Math) curricula, initiatives and scheduling. The Program Manager is also responsible for the implementation and oversight of daytime and evening classes and the afterschool program, including staffing and budgeting. The role includes outreach to local community organizations, schools, and businesses. The Program Manager must have strong leadership skills, excellent communication skills, and an understanding of age-appropriate activities for young children and adults.

Responsibilities

Project Management

- Develop daytime and evening classes and schedules for children and adults
- Write STEM curriculum lessons for children and adults
- Develop and coordinate STEM programs for the afterschool program
- Develop and coordinate special events, including community building events and student showcase events
- Develop, prepare, and monitor the budget; analyze and review financial data
- Research class topics and source guest speakers
- Coordinate school field trips
- Prepare presentations and proposals
- Develop profit sharing programs with community partners

Staff Supervision

- Interview and hire of staff
- Develop teacher training curricula and train staff
- Coordinate volunteers and interns

- Collaborate with designers about the use of the space
- Collaborate with digital media managers to produce web content
- Oversee marketing initiatives, form relationships with local schools and merchants and collaborate with marketing staff for outreach

Community Building

- Cultivate relationships and manage partnerships with schools, local universities and other community partners
- Liaise with corporations regarding team building events
- Develop professional development programs for teachers
- Participate in community events as a representative and to promote programs
- Visit schools to build relationships with school leadership and teachers

Qualifications

- Seven to 10 years of program development experience
- Advanced degree in science and diverse work experience in STEAM education bridging art and science
- Advanced degree in design and an innovative, hands-on approach to project-based learning, inventing and building
- Familiarity with developing and implementing staff training, budget planning and management, and community and corporate partnerships. Excellent program management skills, with the ability to plan, organize, develop, and lead the implementation of projects
- Experience teaching youth and adults

*Reference pages 62-63 for Bridge Golf's Hiring Plan

"I think [golf] prepares you for life because it requires strategy. You have to think about how you're going to hit the shot, how far it's going to go, and what kind of impact you need to make with each swing."

-ELIJAH OPOKU

A Week in the Life

The new Bridge Golf Foundation expansion facility will provide Harlem with an enriched learning environment activated by a wide variety of activities, programs, equipment, furniture and finishes. To encourage collaboration and foster creativity, the center will have very few walls and barriers, but rather an open floor plan for flexibility. It is in this environment that the Foundation's users will engage in project-based learning in a variety of set-ups and spaces through making, collaboration, character development and critical thinking.

STEM learning is the anchor of the afterschool curriculum, emphasizing 21st century skills and college and career readiness. Students engage in collaborative projects where they gain transferable skills, such as communication and critical thinking skills, and develop a sense of civic responsibility. In the proposed Golf Lab, three activities can run

simultaneously with 30 boys split into three groups. Sample activity stations include coding a golf game, designing a golf course, and learning the physics of swinging a club. The afterschool program will not only train boys to develop workforce skills, but also prepare them to mentor and teach younger students through the Youthworks program.

In the mornings, adults are invited to participate in professional development programs, seminars and maker's classes. The center will also allow for program expansion to young children and elementary ages, offering activities such as Tinkering Tots and Elementary Engineers. Then in the evenings, adults and children alike are invited to participate together in a diverse array of projects and experiments with the opportunity to present their creations to the local community.



Credit: Johnny Milano for The New York Times

To create this desired learning environment, the expansion facility is divided into thirds: the “Living Room,” the “Maker’s Space” and the back of house. The Living Room encompasses the front third of the space, serving as a storefront to the center. The glass facade offers visibility, so the public can witness the exciting programs happening inside. Here the users will have a variety of cafe tables, comfortable seating and semi-private booths. The Living Room will host seminars, workshops and casual gatherings with plenty of space to hang out and chat with others as well as have one-on-one conversations.

Beyond the Living Room is the Maker’s Space, roughly 1,325 square feet of open area where students and community members can create, collaborate and get messy. As each day will offer different programs, a variety of furniture types and set-ups are necessary to accommodate the

diverse activities. Activity tables, training tables, activity carts, task chairs and marker boards are a few key components that will enable programs to run smoothly and efficiently. Stacking furniture and furniture on casters will allow the space to transition quickly from one configuration to another.

STEM programs in other parts of New York City are in high demand and are expanding rapidly, but none offer the unique programming of the Learning Annex under one roof. With a goal of maximizing the usage of the space, the following “Week in the Life” schedule proposes 89 hours of programming per week with a mixture of classes, professional programs and community programs, reinforcing the Foundation’s mission of project-based learning and the power of golf. A sample week of programming is provided for Monday through Sunday from 8:00 am to 9:00 pm each day on the following pages.



Credit: Johnny Milano for The New York Times

Weekly Schedule

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
8:00 AM-12:00 PM	ADULT MAKERSPACE I	TEACHER PROFESSIONAL DEVELOPMENT	BREAKFAST BYTES	WEBSITE DESIGN I & II FOR ADULTS APP DEVELOPMENT FOR IPHONE I & 2 FOR ADULT	TEACHER PROFESSIONAL DEVELOPMENT		
NOON	TINKERING TOTS I & II			TINKERING TOTS III & IV	LEARN TO CODE I	LEARN TO CODE II	
	ELEMENTARY ENGINEERS I & II		SCHOOL FIELD TRIP I & II	ELEMENTARY ENGINEERS III & IV	SCIENCE AND TECHNOLOGY SHOWCASE		APP DEVELOPMENT FOR IPHONE YOUTH
1:00 PM-6:00 PM	YOUNG MAKERS I & II			YOUNG MAKERS III & IV		ENTREPRENEUR YOUTH	WEBSITE DESIGN YOUTH
	AFTERSCHOOL MAKERSPACE & CHARACTER EDUCATION LAB						
					AFTERSCHOOL DESIGN CHALLENGE CARDBOARD ROBOTS	BIRTHDAY PARTY YOUTH	MINECRAFT CODING I
					RUBE GOLDBERG		MINECRAFT CLUB
						FAMILY ROBOT CLUB	GIRLS ROBOT CLUB
6:00 PM-9:00 PM	LEARN TO CODE III MINECRAFT CODING II ENTREPRENEUR ADULT	ADULT MAKERSPACE II	COMMUNITY NIGHT	TEAM BUILDING EVENT	PARENTS NIGHT OUT	SPECIAL EVENT ADULT	INTRO TO 3D PRINTING

*See Program Index on pages 48-53 for more information.

EARLY MORNINGS

8:00 AM - 10:00 AM

ADULTS & PROFESSIONALS

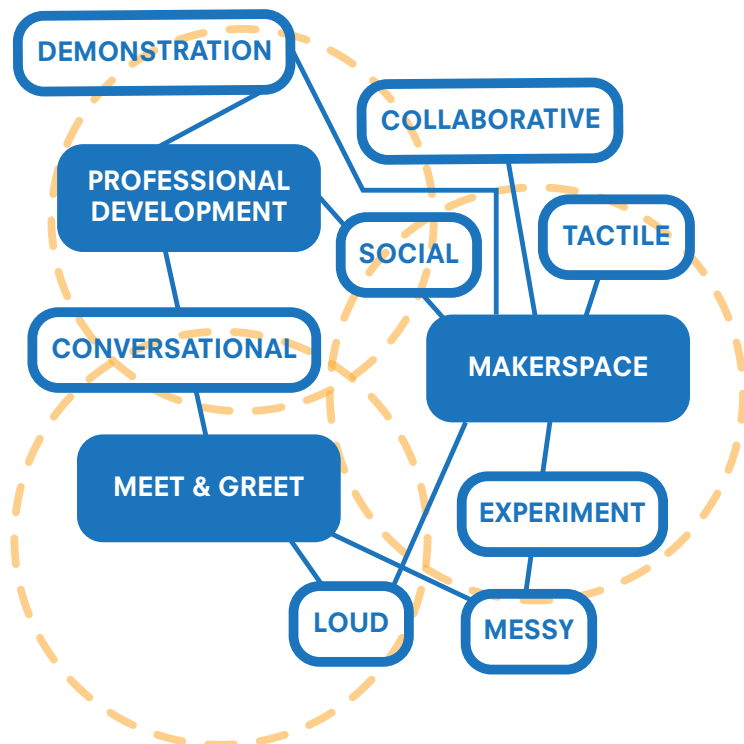
35 PEOPLE

Activity Calendar

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
8:00 AM - 10:00 AM	ADULT MAKERSPACE	TEACHER PROFESSIONAL DEVELOPMENT	BREAKFAST BYTES	WEBSITE DESIGN I & II FOR ADULTS	APP DEVELOPMENT FOR IPHONE I & II FOR ADULTS	TEACHER PROFESSIONAL DEVELOPMENT

User Experience

In the early morning, users like Michelle* have the opportunity to use the Bridge Golf Expansion space to pursue and explore a wide range of hands-on activities, digital media, and instructional training. Adults are invited to visit the Bridge Golf Foundation to pursue professional development through tutorials, group meetings, seminars, and activity-based learning. They can also visit to learn a new computer program, participate in a coding boot camp, or tinker with new technologies like VR, 3D printing and drones. Michelle prefers to spend a couple of mornings each week at the center with Tonya, a coworker, before heading into work. She arrives a little early and grabs a coffee on her way in. She finds Tonya at the Meet & Greet area and they chat for a few minutes before heading to the Makerspace to develop their own websites. On their way out, they notice an advertisement for an interesting seminar next Tuesday. The two sign up for a seat and head to work together.

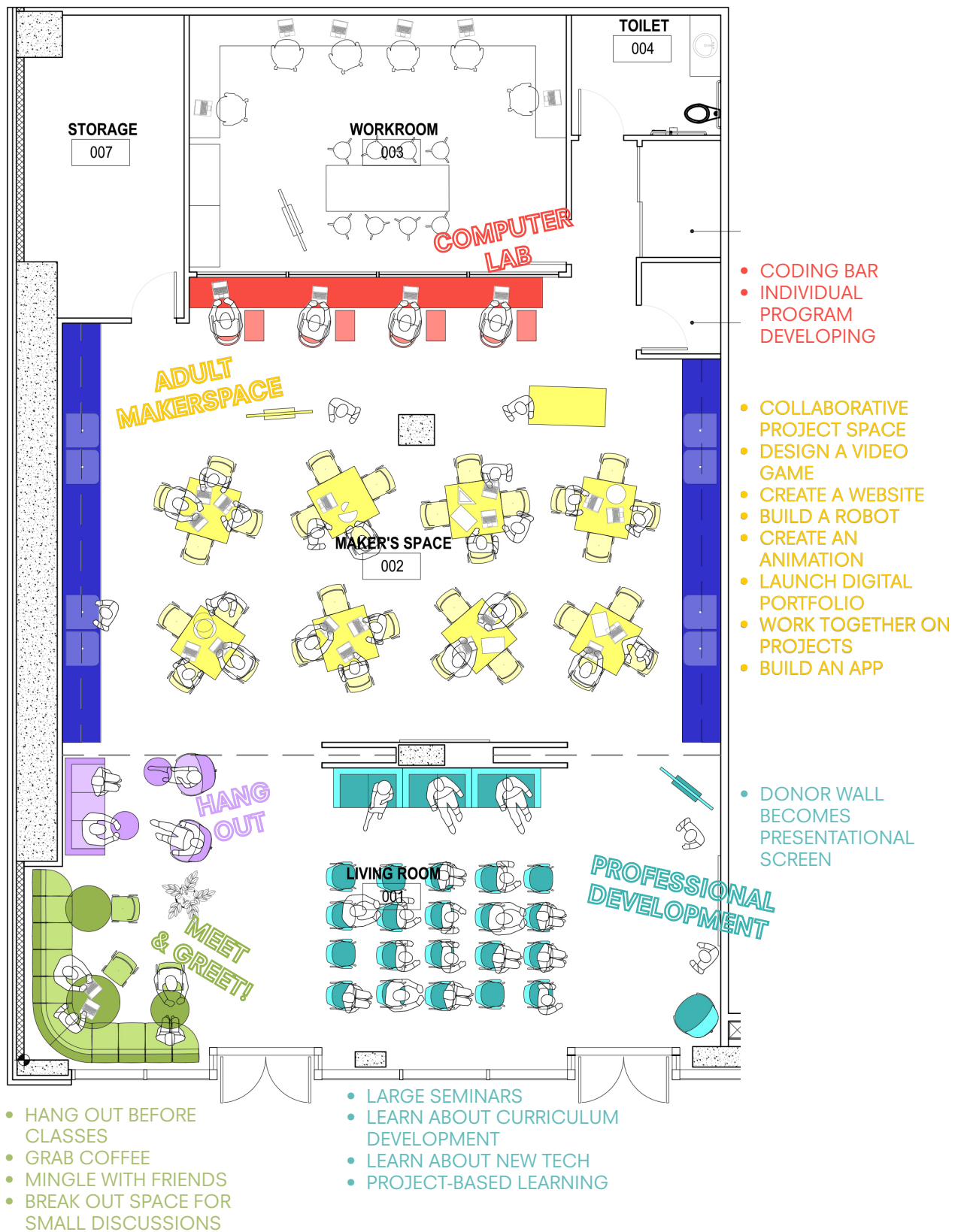


*Reference pages 42-43 for Michelle's User Narrative

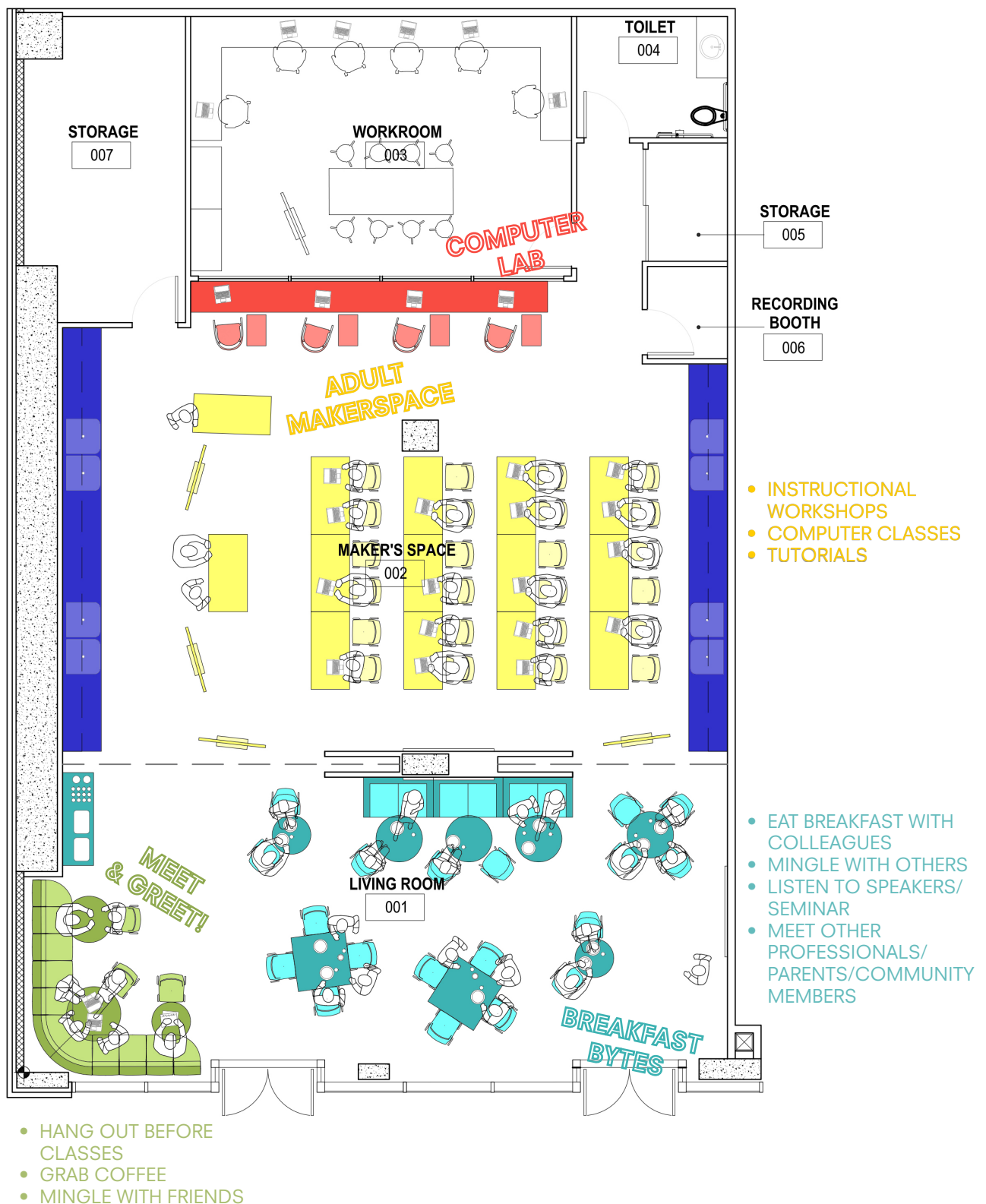
SET-UP 1



SET-UP 2



SET-UP 3



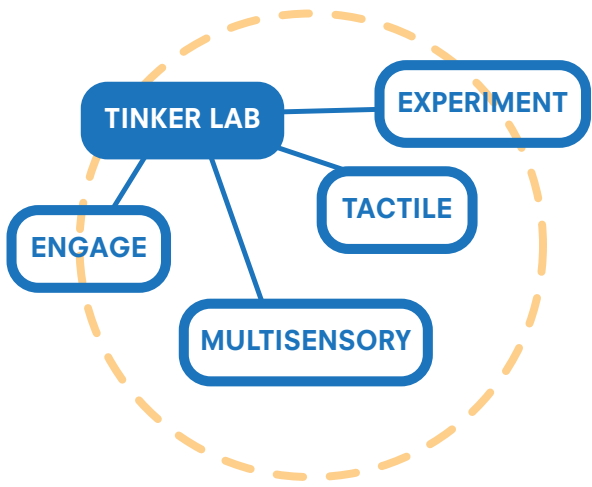
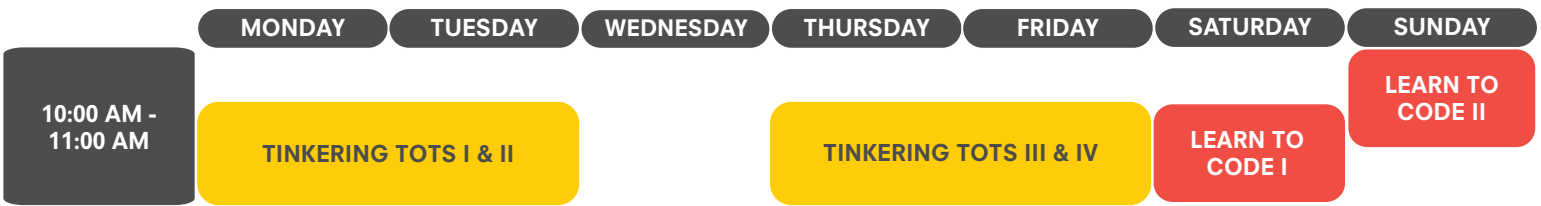
LATE MORNINGS

10:00 AM - 11:00 AM

CHILDREN UP TO AGE 3
WITH PARENT/CAREGIVER

10 PEOPLE

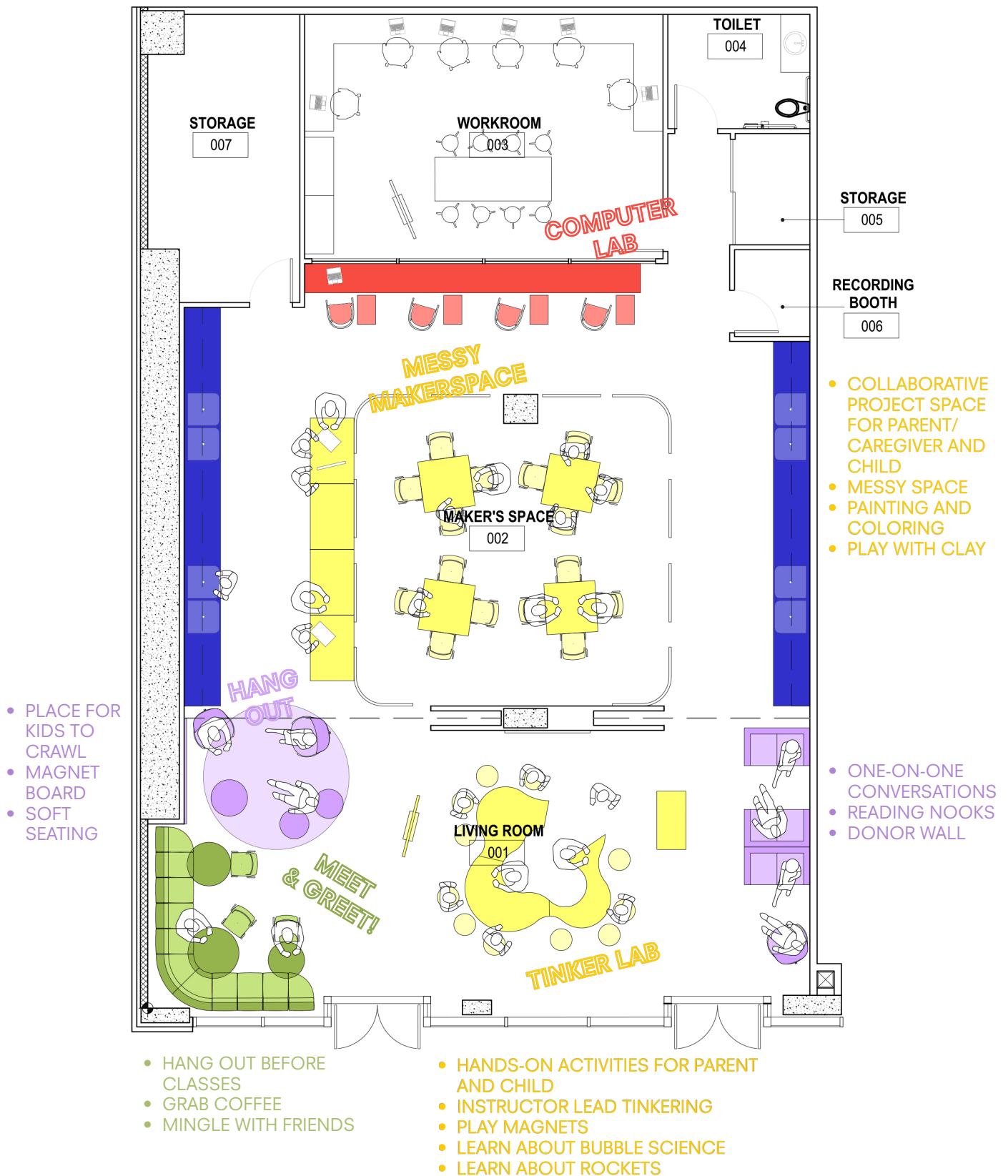
Activity Calendar



User Experience

Each week, several mornings at the center are devoted to toddlers and tinkering. Parents and caregivers can drop off their children with Bridge Golf instructors or stick around to participate alongside in project-based learning. The kids will learn through doing with hands-on activities such as LEGOs, clay modeling and building blocks. For a snack time break, adults and children can use the Meet & Greet area to break and refuel. There is a designated area for crawling and monitored self-directed play with a magnetic wall and soft seating/flooring. Adults have the opportunity to meet other community members and foster meaningful relationships each visit.





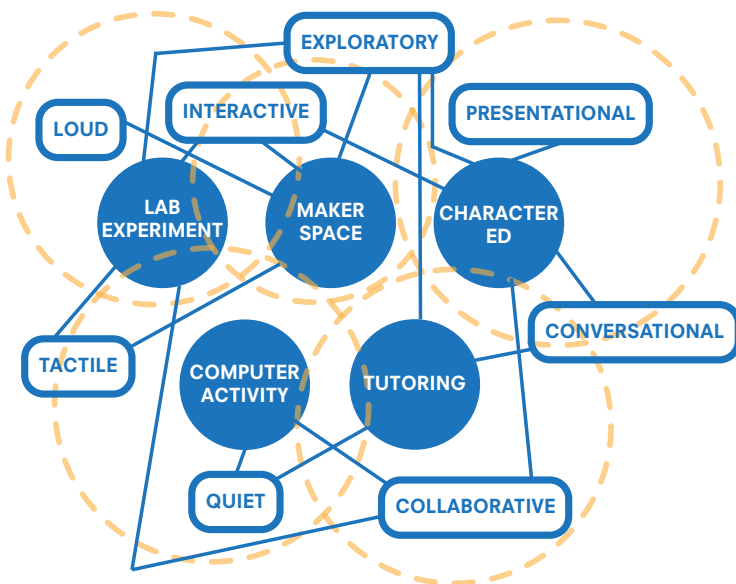
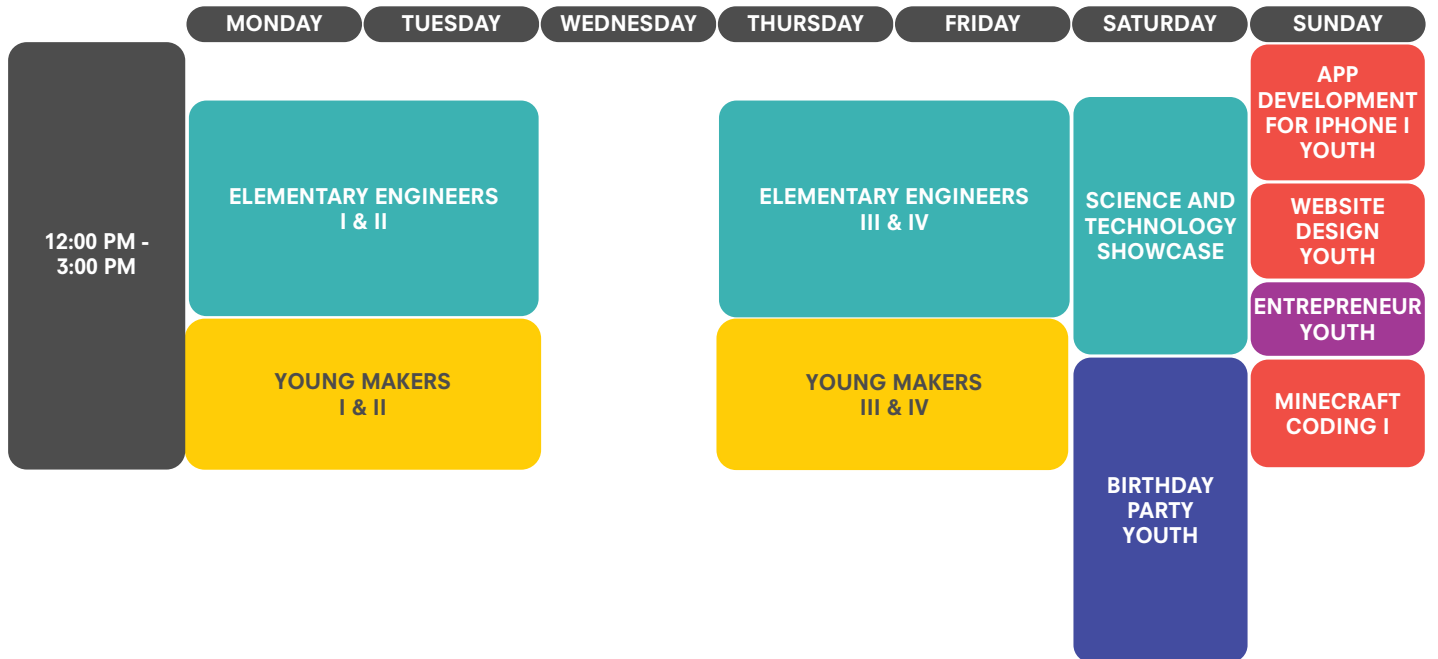
AFTERNOONS

11:00 AM - 3:00 PM

YOUNG CHILDREN, AGE 4-10

18 PEOPLE

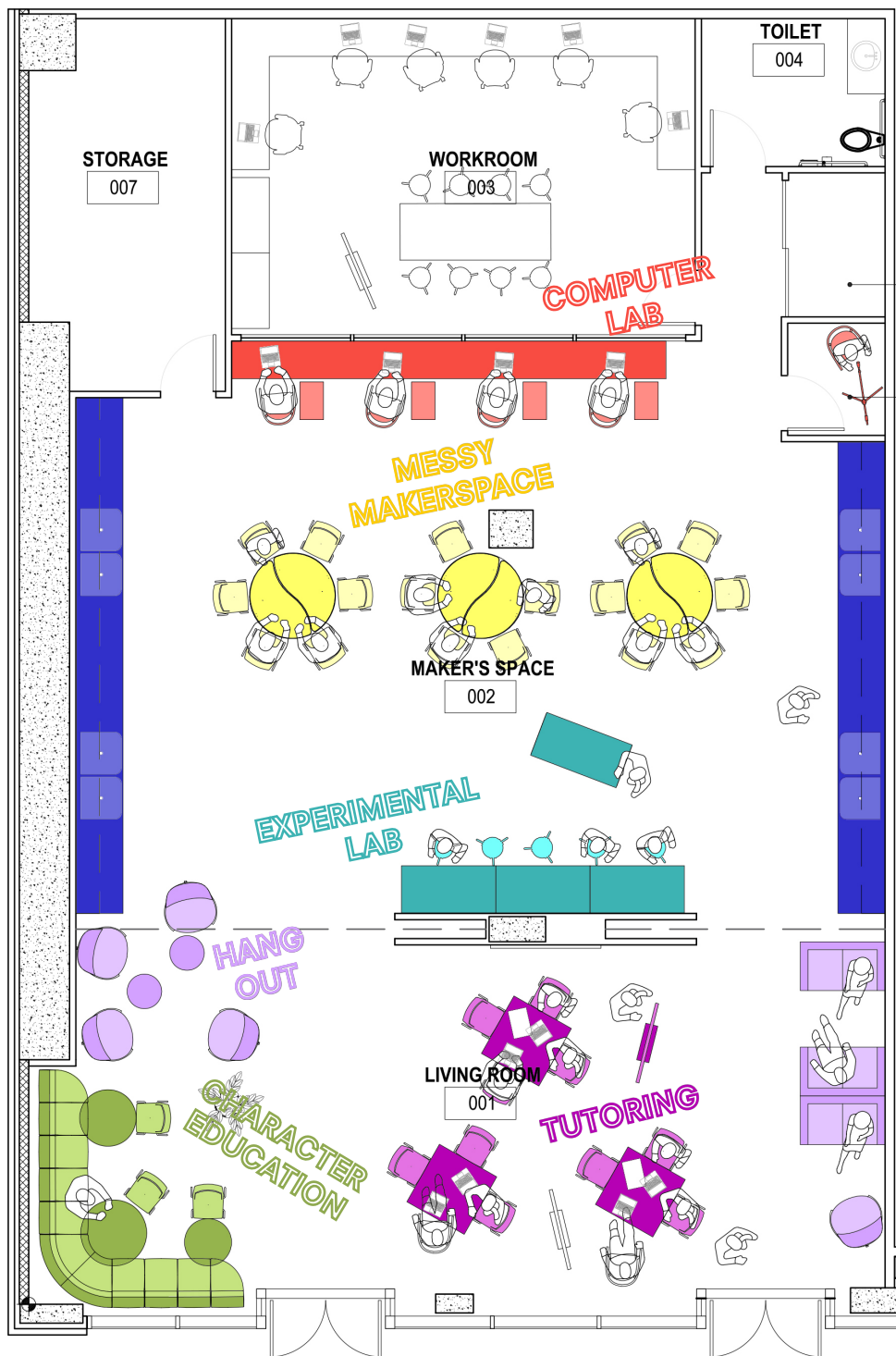
Activity Calendar



User Experience

Afternoons at the Bridge Golf Foundation expansion consist of a variety of stations and activities geared toward children from the ages of 4 to 10. Melanie* likes to visit the center on Tuesdays and Thursdays to participate in the Elementary Engineers program where she learns problem solving through hands-on activities. As she explores in the Experimental Lab, Young Makers are setting up close by with laser cutting equipment. And before her mom arrives from work, Melanie is able to complete her homework in the tutoring station and play a game with friends.

*Reference pages 42-43 for Melanie's User Narrative



- BRING IN INDIVIDUAL PROJECTS
- LAUNCH AN ONLINE PLATFORM
- PROGRAM A ROBOT
- RECORD A PODCAST, VOICE-OVER, OR SONG
- EDIT YOUR RECORDING
- PRODUCT DESIGN PROJECTS
- ROBOTS AND LEGO CONSTRUCTION
- WOOD SHOP ACTIVITIES
- LASER CUTTING/3D PRINTING
- EXPLORE SCIENCE WITH HANDS-ON PROJECTS
- LEARN PHYSICS
- WATER FAIR PROJECT DEVELOPMENT
- SEMI-PRIVATE DISCUSSIONS
- MENTOR MEET-UPS
- DONOR WALL

- SMALL GROUP DISCUSSIONS
- INFORMAL PRESENTATIONS AND PROGRAMS
- SAFE AND COMFORTABLE SPACE FOR DEEP TOPICS

- ONE-ON-ONE TUTORING
- SMALL STUDY GROUPS
- HOMEWORK HELP

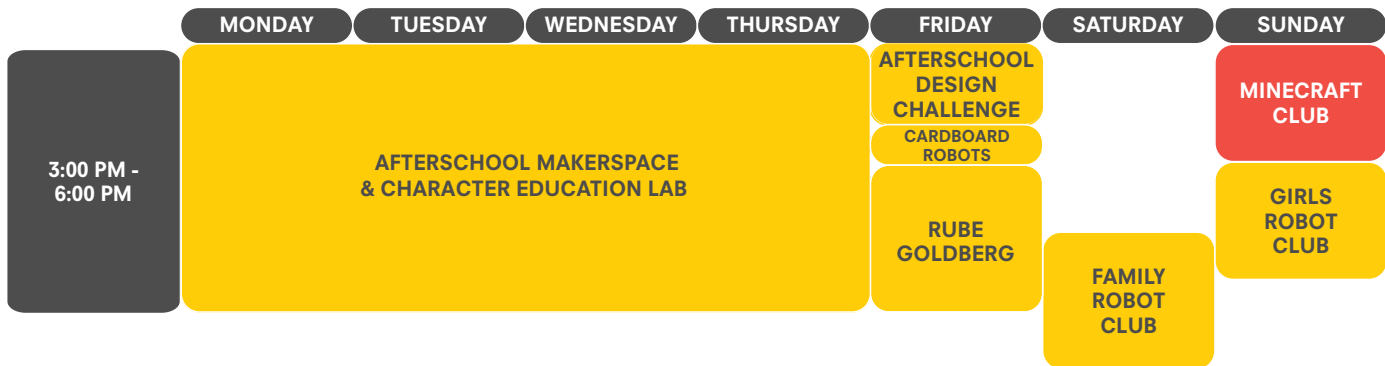
EVENINGS

3:00 PM - 6:00 PM

TEENS & PRE-TEENS, AGE 11-18

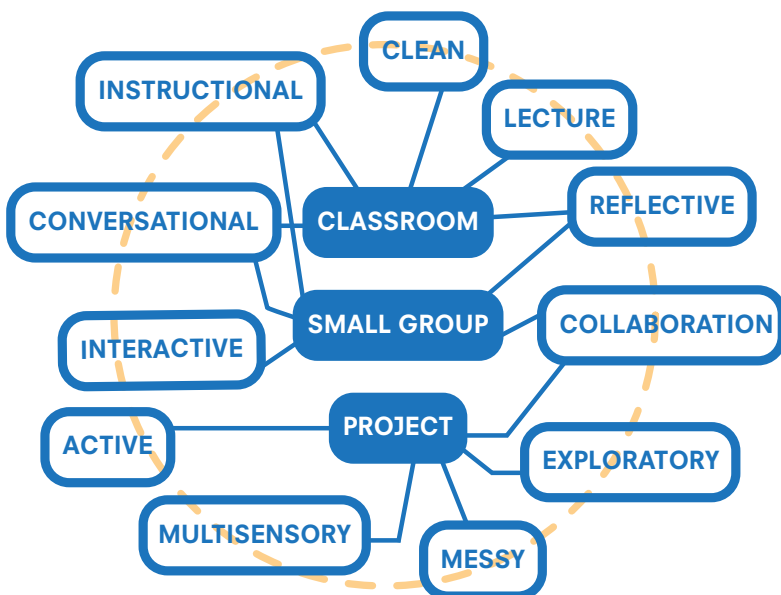
30 PEOPLE

Activity Calendar

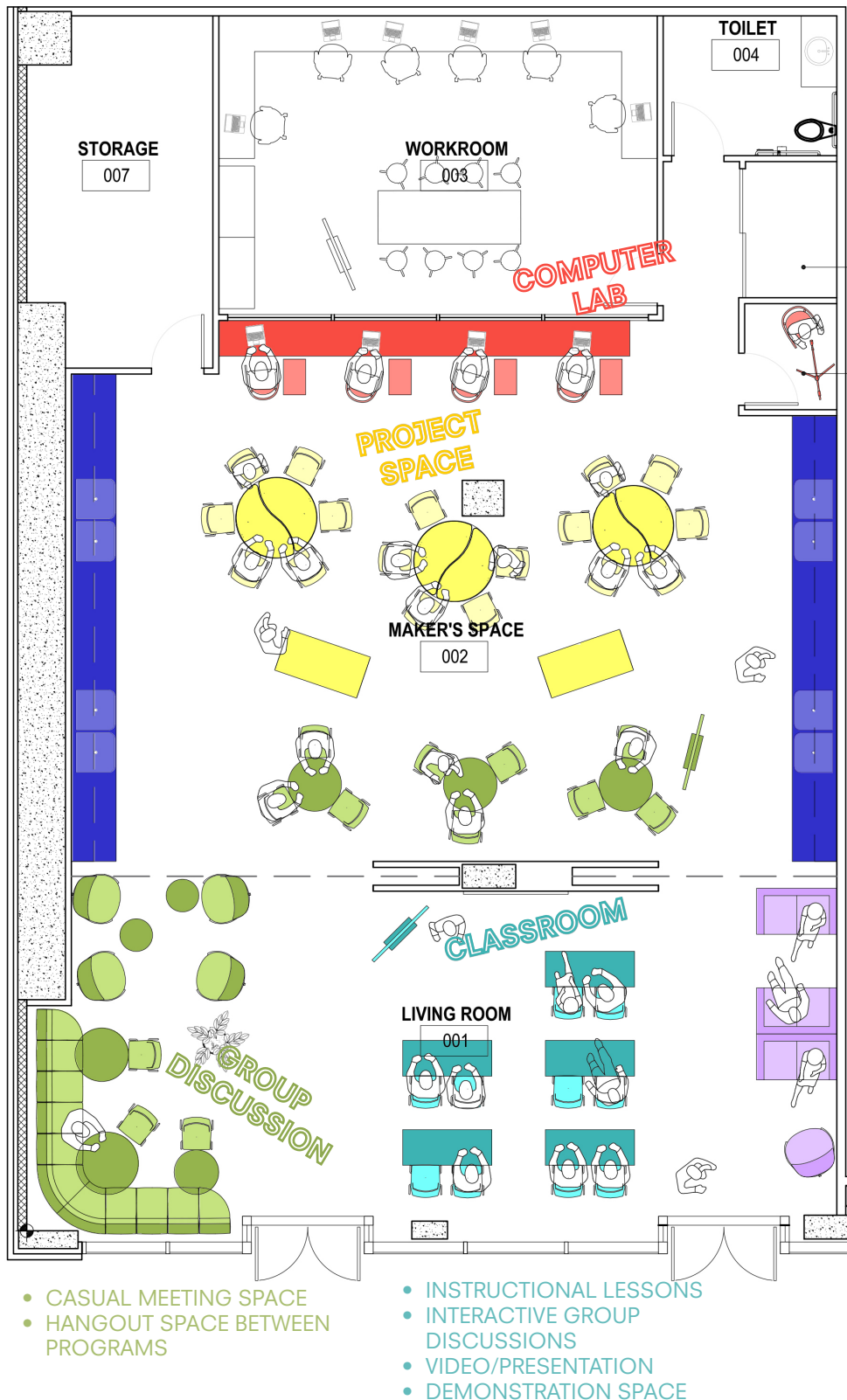


User Experience

After school, the center fills with students from nearby schools. Upon arrival, the students have a snack and socialize while the instructors set up for today's programs. The students divide into smaller groups and Jacob* heads to the informal classroom. Today, the instructor gives a brief lesson on statistics and how it is applied to the game of basketball. There is a group activity and Jacob collaborates with a partner. Then they are encouraged to move to the Group Discussion area to further develop their ideas. Jacob joins a table of three others on the sofa. They discuss the activity, propose some solutions and develop a conclusion together. Next the four teammates join a table at the Maker's Space. Here, the group begins developing an app to calculate an athlete's stats in real time. They plan to meet up for a game of basketball this weekend to test out their new technology!



*Reference pages 36-37 for Jacob's User Narrative



NIGHTS

6:00 PM - 9:00 PM

COMMUNITY EVENTS FOR ALL AGES

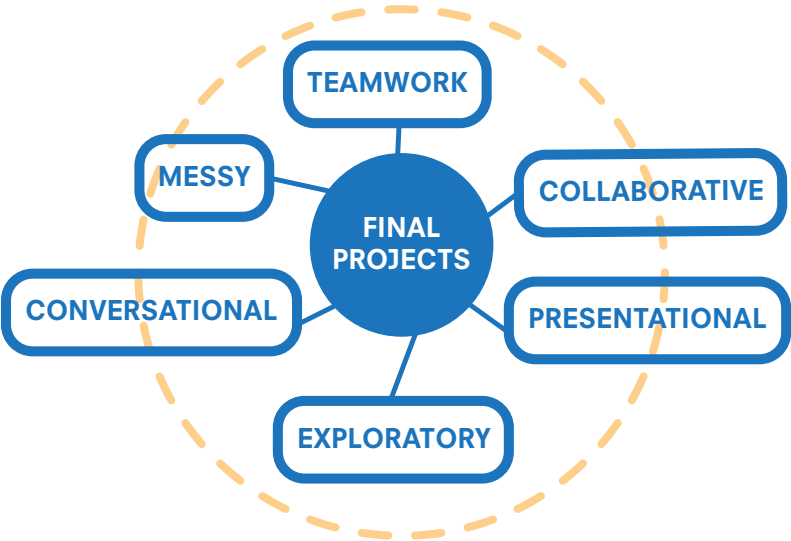
50 PEOPLE

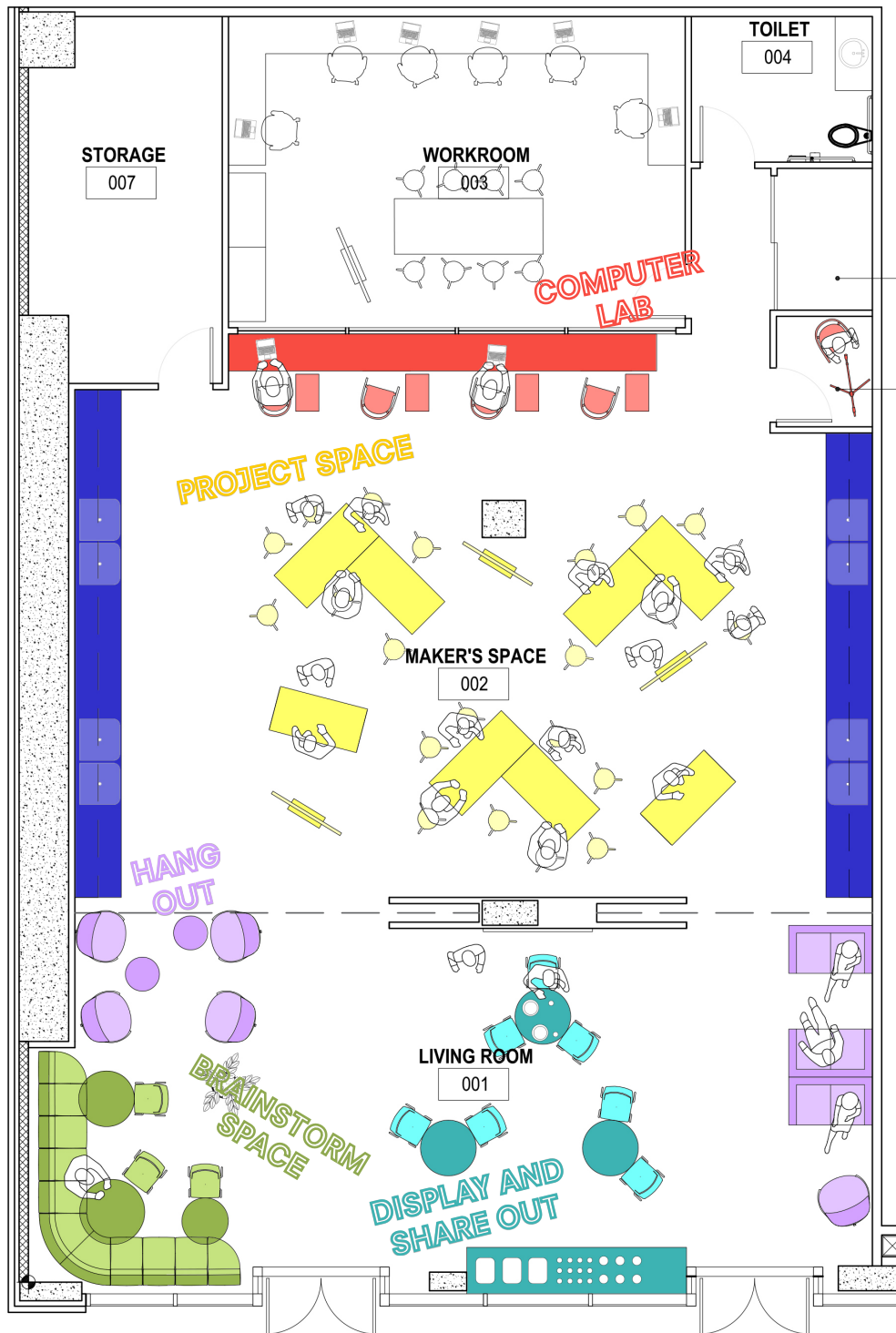
Activity Calendar



User Experience

The work day is over and parents begin arriving at the center. A community program is beginning soon, so families come together for a quick meal using this time to catch up. After dinner in the front of the Center, parents, kids and community members make their way to the Maker’s Space to begin the evening activity. Tonight, the group will form three teams and compete in a robot-building competition. Some groups use the “Brainstorm Space” to discuss ideas and strategy while others begin assembling at the project tables. As projects complete, the groups bring their robots to the front to demonstrate and mingle. Passersby see the excitement and pop in to check out the new creations!





- BRING IN INDIVIDUAL PROJECTS
- RECORD A PODCAST, VOICE-OVER, OR SONG

- FAMILY STEM ACTIVITIES
- COMMUNITY NIGHT ACTIVITIES
- BUILD ROBOTS TOGETHER
- TAKE HOME FINISH PRODUCTS
- LEARN CONCEPTS OF SCIENCE, MECHANIC, ENGINEERING AND ELECTRICITY

- ONE-ON-ONE CONVERSATIONS
- INSTRUCTOR CONSULTATION
- MENTOR MEET-UPS
- BREAK OUT SPACES
- DONOR WALL

- EAT AND MINGLE
- CASUAL GROUP DISCUSSIONS
- BRAINSTORMING AND PREPARATION

- MINGLE AND TINKER
- FOOD FROM LOCAL RESTAURANTS
- SHARE OUT SPACE - FINISH WORK ON DISPLAY

“ We come to The Bridge and learn a lot of things, but when we’re outside of the Foundation, we are still representing what it stands for, even though no one is there to tell us what to do.”

-TARIQ WASHINGTON

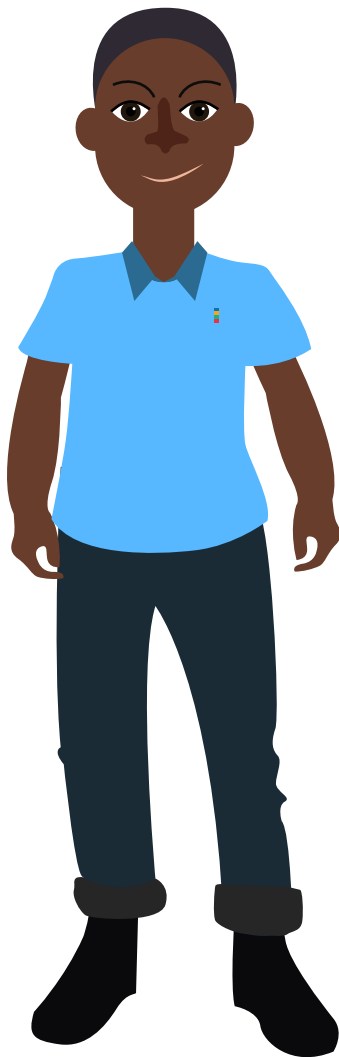
Who Are Our Users?

Students • Families • **Golfers** •
Young Men of Color • New York
City Natives • **Passion-Based
Learners** • Tweens • Engineers
• **Social Entrepreneurs** • Civic
Leaders • Community Activists •
Technology Experts • Makers •
Immigrants • **Mentors** • Friends
• Teenagers • **Professors** •
Millennials • Tinkerers • **Inventors**
• Art Enthusiast • Actors •
Musicians • Artists • Designers
• **Athletes** • Scientists • Leaders
• **Experimenters** • Vloggers •
Directors • **Competitors** • Creators
• Storytellers • **Bigger Pie Mentors**



Jacob

Eagle Academy Student



User Scenario

User:

Jacob is a 13-year-old who is new to the program. He lives in Harlem and likes living in NYC because of the multicultural environment. His mentors are the men in the family including his dad, uncles and his god-brother. He likes to play video games or draw during his spare time. He wants to have a successful career and he's working hard to establish a future to become a marine biologist.

Play Personality:

1. Explorer - Loves to explore something new or different: physically, emotionally or mentally.
2. Artist, Creator - Enjoys making and creating things.

Curiosity:

He's passionate about everything that interests him and likes to face problems instead of avoiding them. He wants to study hard and achieve his goals in life.

Desired Outcome:

He wants the Foundation to help society change the stereotypes for people of color.

Interests

**MAKER
WORKSHOP**

**NEW MEDIA
JOURNALISM**

**CODER
WORKSHOP**

**GAMING,
DESIGN &
DEVELOPMENT**

**VIEWING &
PERFORMANCE**



User Narrative

Jacob is a new participant of the Bridge Golf Foundation and has enjoyed the comradery between classmates, tutors and instructors. He has built up confidence in his golf game, seeing positive results from 100 yards in. He enjoys the excursions to Dunwoodie, but seeing as he is a big video gamer, the simulation golf practice has been a lot fun, too. He is particularly fond of the connections between golf and the STEM programs because Jacob is an aspiring marine biologist. Math and science are key to this career path, so he looks for ways to combine these subjects with his interests, such as golf, video games, drawing and music.

In the new expansion annex, Jacob works with a group of students on a submission for the upcoming Water Fair. He and his friends are focused on a question: How can golf courses use water more efficiently? First Jacob and his team head to the computer lab to do some research on the topic. Once they have gathered statistics and any existing data, they move to the comfy seating towards the front of the center to share out and brainstorm. Before too long, they have moved on to the Maker's Space to carry out some experiments of their own. Jacob works with his hands to test water absorption with a piece of sod grass as his friend Mark records on his iPhone. The two head back to the computer lab to edit their video before the day is over. The group will reconvene the next day to continue their research.

Use

Programs & Services

- Afterschool Design Challenge
- Afterschool Golf Lab
- Afterschool Maker's Space
- Entrepreneur Youth
- Intro to 3D Printing
- App Development for iPhone
- Minecraft Club
- Robotics
- Family Robot Club
- Website Design Youth
- College and Career Readiness
- Mentoring Program

Spaces

- Maker's Space
- Living Room

Furnishings

- Comfortable seating
- Varying size tables

Technology & Equipment

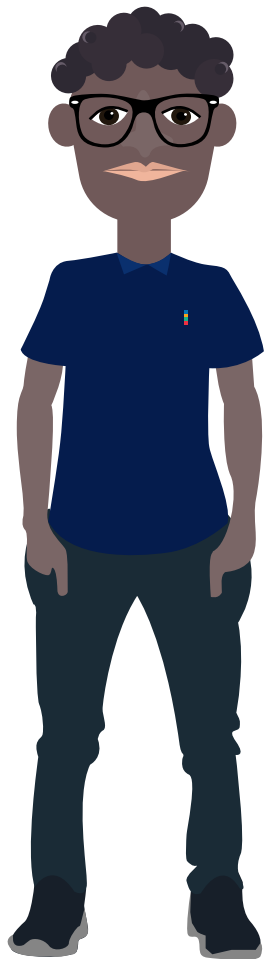
- Latest game tech
- Laptops

Outcomes

- Inspired mindset
- 1st family member to go to college

Elijah

Eagle Academy Student



User Scenario

User:

Elijah is a 12-year-old who lives with his parents, brother and sister. He is the eldest among his siblings. He loves learning golf because he thinks it prepares you for life by requiring strategy. In the future, he wants to be an actor, so people can see who he really is. He loves going on trips and meeting new people and interacting with the other kids in the program.

Play Personality:

1. Explorer - Loves to explore something new or different: physically, emotionally or mentally.
2. Kinesthete - Someone who loves to move and push their body to see what it can do.

Curiosity:

He enjoys the inspiration from others around him and wants to develop his way of thinking to give him a positive effect in life.

Desired Outcome:

Understanding fluent relationships, always searching for his own path and wants to be a successful person.

Interests

**MAKER
WORKSHOP**

**NEW MEDIA
JOURNALISM**

**MUSIC & AUDIO
PRODUCTION**

**GAMING,
DESIGN &
DEVELOPMENT**

**PHOTO, VIDEO
& EDITING**

User Narrative

Elijah's favorite part of participating in the Bridge Golf program is the friendships he has built with other boys his age over the game of golf. Although he aspires to be an actor one day, Elijah recognizes how the game of golf is impacting his future career. The key to the game is strategy, he says.

Elijah is particularly interested in the broadcasting technology the annex provides. During the Afterschool Maker's Space time, he grabs his friend Antonio, and the two head to the Recording Studio to produce their own podcast. Elijah is a big fan of the NY Giants and wants to record and publish his own analysis of the on-going season. Antonio is interested in producing the soundtrack for the production, so the two split up their duties accordingly.

Each day, Elijah spends time in the Recording Studio until the content is complete. He then uses the computer lab for editing and mixing with Antonio's music tracks. After a week, the two have a finished product. They consult an instructor on how to launch their podcast so their friends can stream.

Use

Programs & Services

- Learn to Code
- Afterschool Design Challenge
- Minecraft Coding
- Afterschool Golf Lab
- Afterschool Toy Lab
- Science & Technology Showcase
- App Development
- Website Design
- College and Career Readiness
- Mentoring Program

Spaces

- Maker's Space
- Living Room

Furnishings

- Maker tables with storage
- Comfortable hangout space

Technology & Equipment

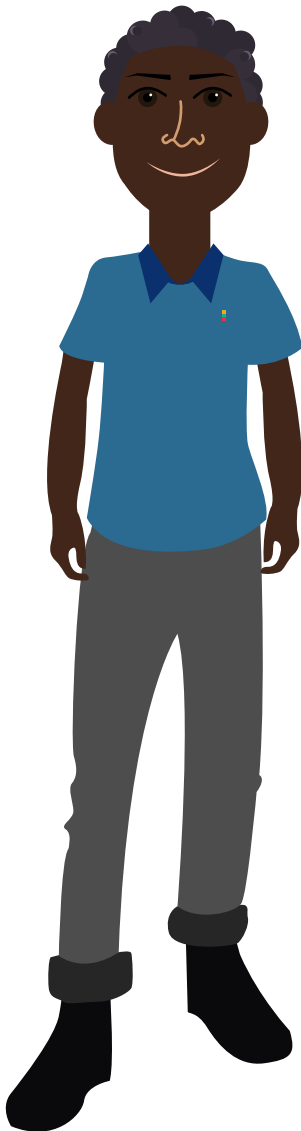
- Laptops
- Computer softwares

Outcomes

- Meeting new people
- The Scientific Method
- College and career readiness

Noah

Eagle Academy Student



User Scenario

User:

Noah is 16 years old and lives in the Bronx with his parents and two older sisters. He considers his parents the most important and influential people in his life. He has a variety of business ideas he wants to achieve later in life including entrepreneur, gaming company CEO, restaurants, real estate and owning a sneaker store. His favorite part of the Bridge Golf Foundation is the character education. He relates to the topics a lot, mostly about current events and what's happening in the world.

Play Personality:

1. Competitor - Loves competitive games with rules and likes to play to win.
2. Director - Enjoys executing, planning. Loves organization.

Curiosity:

Winning, success, belief in the future. Loves playing games, driven by passion. Always searching for his own path and wants to be a successful person.

Desired Outcome:

Truly understanding problems/issues and the willingness to solve them.

Interests

**MAKER
WORKSHOP**

**NEW MEDIA
JOURNALISM**

**CODER
WORKSHOP**

**GAMING,
DESIGN &
DEVELOPMENT**

**VISUAL, DESIGN
& ILLUSTRATION**

User Narrative

Noah, being a long-time participant in the Bridge Golf Foundation afterschool program, has anticipated the facility's vision of expansion. His golf game significantly improved over summer, although he is now feeling a little rusty with the break he took from practicing during the holidays. Noah looks forward to getting back to the Bridge Golf center after school to improve his swing and spend time with his friends. With the opening of the expansion facility, Noah learns he now has a space to paint and produce artwork in the Maker's Space! Not only does he have the space, but he can also take part in programs like the Afterschool Design Program and maker workshops that facilitate art projects!

Noah meets with his mentor, Paul Ferraro, every other Thursday at the new center. The two claim a booth in the living room where they can have a little privacy for discussion. Noah aspires to make the principal's honor roll this semester to continue his streak. His mentor gives some good advice and encourages Noah in the areas where he is struggling. Noah expresses his interest in a recent entrepreneur class and Paul recommends a book that would complement the course.

As Paul heads out, they schedule their next meet-up in two weeks. In the meantime there is a community project night coming up and the two decide to sign up together!

Use

Programs & Services

- Entrepreneur Youth
- Learn to Code
- Afterschool Golf Club
- Mentoring Program
- Team Building
- Intro to 3D Printing
- Website Design Youth
- School Field Trip
- Minecraft Club
- College and Career Readiness

Spaces

- Maker's Space
- Living Room

Furnishings

- Colorful
- Comfortable furniture

Technology & Equipment

- Latest game technology
- LEGO®

Outcomes

- Learn problem-solving skills
- Land an internship

Michelle & Melanie

Newcomer

User Scenario

User:

Melanie is a 10-year-old girl who lives in Harlem. Her mother, Michelle, is a single mother working long shifts to support her family. Melanie loves making things and has very crafty hands. Michelle wants Melanie to enroll in the makers program to let her freely express her creativity. She is a soft-hearted child and easily gets along with people in new environments.

Play Personality:

1. Explore - Loves to explore something new or different: physically, emotionally or mentally.
2. Kinesthete - Someone who loves to move and push their body to see what it can do.

Curiosity:

She likes to read and loves to create and express herself in drawing/doodling. She's very visual and loves to see the world! She wants autonomy in terms of her experience. She longs to inspire others.

Desired Outcome:

She desires to be mentored and to make a living through her art. She wishes the program pushed her limit to help her gain new experiences.

Interests

**MAKER
WORKSHOP**

**NEW MEDIA
JOURNALISM**

**VIEWING &
PERFORMANCE**

**PHOTO, VIDEO
& EDITING**

**VISUAL, DESIGN
& ILLUSTRATION**



User Narrative

Melanie attends quite a few programs at the Bridge Golf Learning annex, but her favorite is Community Night. When her mom has a night off, the two attend an evening workshop at the center which is always a treat. Melanie loves to show her mom that she knows her way around the Maker's Space, volunteering to demonstrate how to use each piece of equipment. Michelle values this time with her daughter and is impressed by her knowledge! The two team up with another family at a project table in the Maker's Space. Tonight they are working in groups to create catapults. At the end of the night, there will be a competition to see whose catapult can throw an object the furthest!

Melanie draws up a design and the team critiques the plan together. They make a few tweaks, but ultimately agree upon the drawing and get to building. Melanie wanders around to compare her team's progress with their competitor's and realizes everyone's design is very different! The end of the night is approaching so she rushes back to add any finishing touches.

Melanie, Michelle and the rest of the team take their catapult to the designated area for testing. Melanie is given the liberty to operate the device and the team comes in second! She is very pleased and can't wait to take the catapult home and play some more.

Use

Programs & Services

- Elementary Engineers
- Young Makers
- Girls Robot Club
- Team Building Event
- Community Night
- Family Robot Club
- Learn to Code
- Minecraft Club
- Mentoring Program
- School Field Trip

Spaces

- Maker's Space
- Living Room

Furnishings

- Cozy and welcoming
- Varying size tables

Technology & Equipment

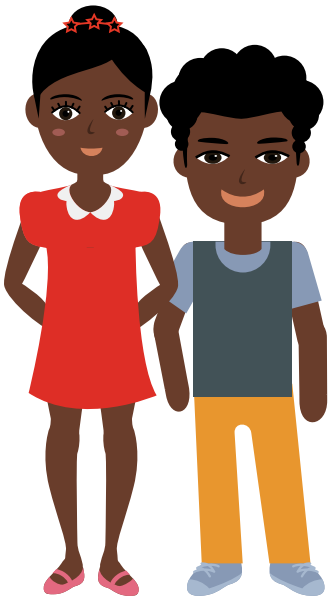
- Color spinners
- EV3 LEGO®

Outcomes

- What a 3D printer is and does
- Basic STEM concepts

Liam & Crista

Newcomer



User Scenario

User:

Liam is a 5-year-old who is passionate about learning and getting into everything. He lives in Harlem with his grandmother, parents and his older sister, Crista, who is in 2nd grade. He looks up to his sister who likes to take on a motherly role toward her little brother. The two attend Elementary Engineers during the week and enjoy working and creating together! Liam's favorite activity involves creating miniature cities with LEGOs.

Play Personality:

1. Artist, Creator - Enjoys making and creating things.
2. Explore - Loves to explore something new or different: physically, emotionally or mentally.

Curiosity:

Perceives and learns through touching. Not afraid to cross boundaries if he sees something of interest.

Desired Outcome:

Taking home created things. Finished products from his own two hands are a source of pride. Desires to show off his work.

Interests

**MAKER
WORKSHOP**

**GAMING,
DESIGN &
DEVELOPMENT**

**VIEWING &
PERFORMANCE**

**VISUAL, DESIGN
& ILLUSTRATION**

User Narrative

Liam's favorite days of the week are the days he visits the Bridge Golf Learning Center annex. His room is filled with crafts and projects he created at Elementary Engineers. These include clay models, a motorized Lego creation and even a 3D printed golf ball! When he arrives at the center this week, he finds out the class will be building robots in pairs. Liam wants to work with his sister who is happy to collaborate. She goes to collect the supplies as Liam daydreams about their future creation.

This project takes a few days to complete. Liam finds this a little frustrating as he wants to take his robot home right away to play, but Crista explains the process and how important it is to be patient. The two are hard at work each day in the Maker's Space. With the supervision of an instructor, the pair are using activity tables, activity carts, laptop stations and various technologies available. Finally, at the end of a long hard week, Liam and his sister have a completed robot! They spend the rest of their Friday afternoon playing with their creation in the Living Room with their other classmates. Before leaving, the instructor organizes a group discussion about how robots are made and can be used in everyday life. Liam is inspired by the exercise and develops a new interest in robotics.

Use

Programs & Services

- Elementary Engineers
- Young Makers
- Rube Goldberg
- Community Night
- Minecraft Club
- Robotics
- Family Robot Club
- Website Design Youth
- Mentoring Program

Spaces

- Maker's Space
- Living Room

Furnishings

- Variety of seating
- Activity tables

Technology & Equipment

- Gaming equipment
- Laptops

Outcomes

- Language readiness
- Basic geometry and addition
- Kindergarten readiness

Sabrina

Newcomer



User Scenario

User:

Sabrina is a 15-year-old girl from a Hispanic family who lives with her parents and her brothers. Her favorite subjects in school are math and physics. She loves surrounding herself with new people in new environments. She is always down to try new things no matter what it is. Her high level of curiosity toward new material pushes her forward. She wants to be a software engineer when she grows up.

Play Personality:

1. Explore - Loves to explore something new or different: physically, emotionally or mentally.
2. Kinesthete - Someone who loves to move and push their body to see what it can do.

Curiosity:

She likes to read and loves to express herself.

Desired Outcome:

She desires to be mentored and to make a living through what she really wants to do and enjoy. The Foundation opened opportunity and potential that she didn't know existed.

Interests

**MAKER
WORKSHOP**

**NEW MEDIA
JOURNALISM**

**VIEWING &
PERFORMANCE**

**PHOTO, VIDEO
& EDITING**

**VISUAL, DESIGN
& ILLUSTRATION**

User Narrative

Sabrina has always had a passion for technology. Starting at a very young age, she has enjoyed tinkering with cell phones and computers. So when she finds out about this cool new maker's space down the street, she is ecstatic! Immediately, Sabrina signs up for the Girls Robot Club and Website Design for Youth. She gets involved and before long, has several new friends. They tell her about another program at the center that takes place after school and is specifically geared toward making! Sabrina signs up and attends the following week.

Throughout the school year, Sabrina builds software, records videos, makes 3D models, and learns the basics of computer coding. The center helps her develop passions for which she previously had no outlet. Not only does she develop her skills, but she meets other girls her age that have the same interests! The Bridge Golf Center annex becomes her afterschool and weekend hub.

An instructor asks Sabrina if she has any interest in sports. She says she has never been too athletic but loves trying new things. He invites her to the golf lab where she tries putting for the first time. It comes more naturally than she expected! Soon she is not only coming to the center for making, but practicing her golf game as well.

Use

Programs & Services

- Girls Robot Club
- Afterschool Toy Lab
- Afterschool Design Challenge
- Website Design Youth
- App Development for iPhone
- Cardboard Robots
- Minecraft Club
- Entrepreneur Youth
- Community Night
- Mentoring Program

Spaces

- Maker's Space
- Living Room

Furnishings

- Whiteboards
- Lounge chairs

Technology & Equipment

- 3D printers
- Computer software

Outcomes

- Technology literacy
- Mentorship
- Discovering a new skill
- School grades improve



Appendix

01 Program Descriptions

02 Hiring Plan

Program Descriptions

	Description	# Sessions	Tuition per Session	Total Tuition	# of Students	Total Revenue
Tinkering Tots I	Tinkering Tots Parent/Caregiver & Child up to age 3 In this class, we play with materials such as magnets and clay, and learn science concepts such as bubble science and rocket flight. In this class both child and caregiver build and learn together.	3	39	117	5	585
Tinkering Tots II	Tinkering Tots Parent/Caregiver & Child up to age 3 In this class, we play with materials such as magnets and clay, and learn science concepts such as bubble science and rocket flight. In this class both child and caregiver build and learn together.	3	39	117	5	585
Tinkering Tots III	Tinkering Tots Parent/Caregiver & Child up to age 3 In this class, we play with materials such as magnets and clay, and learn science concepts such as bubble science and rocket flight. In this class both child and caregiver build and learn together.	3	39	117	5	585
Tinkering Tots IV	Tinkering Tots Parent/Caregiver & Child up to age 3 In this class, we play with materials such as magnets and clay, and learn science concepts such as bubble science and rocket flight. In this class both child and caregiver build and learn together.	3	39	117	5	585
Young Makers I	Young Makers age 4-6 From magnetism to the science of sound, our young makers will explore science and engineering through various hands-on projects. Projects include lava lamps, boats, catapults and color spinners. Kids are introduced to physics topics ranging from buoyancy and displacement to trajectories and projectile motion. Students take home their projects from each class.	8	39	312	6	1872
Young Makers II	Young Makers: Robotics Students will enjoy experimenting with science while they learn to build playful motorized creations with LEGO®.	8	39	312	6	1872
Young Makers III	Young Makers age 4-6 From magnetism to the science of sound, our young makers will explore science and engineering through various hands-on projects. Projects include lava lamps, boats, catapults and color spinners. Kids are introduced to physics topics ranging from buoyancy and displacement to trajectories and projectile motion. Students take home their projects from each class.	8	39	312	6	1872
Young Makers IV	Young Makers: Robotics Students will enjoy experimenting with science while they learn to build playful motorized creations with LEGO®.	8	39	312	6	1872
Elementary Engineers I	Home School Groups age 5-10 Join us during the day to explore engineering and science concepts in a fun and engaging curriculum. Create projects using batteries, lights, motors, construction materials and recyclables. Use the principles of engineering, mechanics and physics to understand how and why things work the way they do. Students will learn problem solving skills and the product design process. Students will create and take home interactive projects and 3D printed designs.	8	48	384	8	3072

# of Students	Total Revenue	Cost of Materials	# of Staff	Session Hours	Hourly Cost of Staff	Total Staff Cost	Total Costs	Weekly Rev (low)	Weekly Rev (high)	Weekly Profit (low)	Weekly Profit (high)
12	1404	35	1	1	22	66	101	195	468	161	401
12	1404	35	1	1	22	66	101	195	468	161	401
12	1404	35	1	1	22	66	101	195	468	161	401
12	1404	35	1	1	22	66	101	195	468	161	401
18	5616	75	1	1.5	22	264	339	234	702	192	617
18	5616	0	1	1.5	22	264	264	234	702	201	636
18	5616	75	1	1.5	22	264	339	234	702	192	617
18	5616	0	1	1.5	22	264	264	234	702	201	636
18	6912	200	1	2	22	352	552	384	864	315	726



	Description	# Sessions	Tuition per Session	Total Tuition	# of Students	Total Revenue
Elementary Engineers II	Home School Groups: Robotics Join us during the day to explore engineering and science concepts in a fun and engaging curriculum. Students will work together to design and construct their own interactive, autonomous robots using EV3 LEGO® motors, sensors, and microprocessors.	8	48	384	8	3072
Elementary Engineers III	Home School Groups Join us during the day to explore engineering and science concepts in a fun and engaging curriculum. Create projects using batteries, lights, motors, construction materials and recyclables. Use the principles of engineering, mechanics and physics to understand how and why things work the way they do, Students will learn problem solving skills and the product design process. Students will create and take home interactive projects and 3D printed designs.	8	48	384	8	3072
Elementary Engineers IV	Home School Groups: Robotics Join us during the day to explore engineering and science concepts in a fun and engaging curriculum. Students will work together to design and construct their own interactive, autonomous robots using EV3 LEGO® motors, sensors, and microprocessors.	8	48	384	8	3072
Learn to Code I	Learn to Code for ages 8-11 In this introductory course, students will use Scratch, a drag-and-drop programming language, to learn the fundamentals and creative power of computer science. Students will work on projects that are designed to teach programming concepts, such as loops, variables, conditionals, and functions. Students will code stories, games and animations. Students will then use physical computing with Makey Makey kits to create game controllers which can control the programs they created in Scratch.	10	35	350	10	3500
Learn to Code II	Learn to Code for ages 8-11 In this introductory course, students will use Scratch, a drag-and-drop programming language, to learn the fundamentals and creative power of computer science. Students will work on projects that are designed to teach programming concepts, such as loops, variables, conditionals, and functions. Students will code stories, games and animations. Students will then use physical computing with Makey Makey kits to create game controllers which can control the programs they created in Scratch.	10	35	350	10	3500
Learn to Code III	Learn to Code for ages 8-11 In this introductory course, students will use Scratch, a drag-and-drop programming language, to learn the fundamentals and creative power of computer science. Students will work on projects that are designed to teach programming concepts, such as loops, variables, conditionals, and functions. Students will code stories, games and animations. Students will then use physical computing with Makey Makey kits to create game controllers which can control the programs they created in Scratch.	10	35	350	10	3500

# of Students	Total Revenue	Cost of Materials	# of Staff	Session Hours	Hourly Cost of Staff	Total Staff Cost	Total Costs	Weekly Rev (low)	Weekly Rev (high)	Weekly Profit (low)	Weekly Profit (high)
18	6912	0	1	2	22	352	352	384	864	340	776
18	6912	200	1	2	22	352	552	384	864	315	726
18	6912	0	1	2	22	352	352	384	864	340	776
20	7000	0	1	1	25	250	250	350	700	325	650
20	7000	0	1	1	25	250	250	350	700	325	650
20	7000	0	1	1	25	250	250	350	700	325	650



	Description	# Sessions	Tuition per Session	Total Tuition	# of Students	Total Revenue
Website Design Youth	Website Design for ages 12-18 Students will use JavaScript, HTML and CSS to learn the fundamentals of website design and development. Students will launch a personal website portfolio and work together on projects that are designed to teach essential programming concepts including variables, conditionals, and functions in JavaScript.	10	35	350	8	2800
Website Design I Adult	Website Design Beginner Students will use JavaScript, HTML and CSS to learn the fundamentals of website design and development. Students will launch a personal website portfolio and work together on projects that are designed to teach essential programming concepts including variables, conditionals, and functions in JavaScript.	10	35	350	8	2800
Website Design II Adult	Website Design Advanced Students will use JavaScript, HTML and CSS to work on advanced web projects.	10	35	350	8	2800
App Development for iPhone Youth	App Development for iPhone for ages 12-18 Students will use the Swift programming language and Apple's XCode development environment to design and build their own iPhone or iPad apps. Students will build on core computer science concepts and design, build, and present iPhone or iPad apps that solve a social problem.	10	35	350	8	2800
App Development for iPhone Adult I	App Development for iPhone Students will use the Swift programming language and Apple's XCode development environment to design and build their own iPhone or iPad apps. Students will build on core computer science concepts and design, build, and present iPhone or iPad apps that solve a social problem.	10	35	350	8	2800
App Development for iPhone Adult II	App Development for iPhone Students will use the Swift programming language and Apple's XCode development environment to design and build advanced iPhone or iPad apps.	10	35	350	8	2800
Minecraft Coding I	Minecraft Coding for ages 8 and up Students will learn the fundamentals of Java™ programming, while coding their own Mods, skins, blocks, mobs, and other items. Java is the most widely-used programming language in the world, and students will learn instantiation, methods, parameters, loops and and how to fix bugs as they arise. No prior experience necessary.	10	40	400	20	8000
Minecraft Coding II	Minecraft Coding for ages 8 and up Students will learn the fundamentals of Java™ programming, while coding their own Mods, skins, blocks, mobs, and other items. Java is the most widely-used programming language in the world, and students will learn instantiation, methods, parameters, loops and and how to fix bugs as they arise. No prior experience necessary.	10	40	400	20	8000
Minecraft Club	Minecraft Club for ages 8 and up Students will meet like-minded peers and share their mods with friends.	10	20	200	20	4000



# of Students	Total Revenue	Cost of Materials	# of Staff	Session Hours	Hourly Cost of Staff	Total Staff Cost	Total Costs	Weekly Rev (low)	Weekly Rev (high)	Weekly Profit (low)	Weekly Profit (high)
20	7000	0	1	1	25	250	250	280	700	255	650
20	7000	0	1	1	25	250	250	280	700	255	650
20	7000	0	1	1	25	250	250	280	700	255	650
20	7000	0	1	1	25	250	250	280	700	255	650
20	7000	0	1	1	25	250	250	280	700	255	650
20	7000	0	1	1	25	250	250	280	700	255	650
30	12000	100	1	1	35	350	450	800	1200	755	1110
30	12000	100	1	1	35	350	450	800	1200	755	1110
30	6000	0	1	1	30	300	300	400	600	370	540



	Description	# Sessions	Tuition per Session	Total Tuition	# of Students	Total Revenue
Entrepreneur Youth	Entrepreneur for ages 10 and up Students will brainstorm business ideas, create a business plan, calculate a budget, devise a marketing plan. practice a presentation and pitch their idea to potential investors.	10	40	400	20	8000
Entrepreneur Adult	Entrepreneur Students will brainstorm business ideas, create a business plan, calculate a budget, devise a marketing plan. practice a presentation and pitch their idea to potential investors.	10	40	400	20	8000
After School Makerspace	After School Makerspace Daily activities will use technology like 3D printers, circuits, computers and more. This week: Toy Lab: design your own board game and 3D printing the game pieces Electricity and Circuits: learn about simple circuits. Students will make their own version of the HEX bug and experiment how they navigate mazes, Coding: program several sports games, including tennis and golf matches and add backgrounds, characters, sound and speech blocks. Golf Lab: physics of golf including analysis of swing in correlation to golf club size and shape, 3D print your own golf club or design a golf course Design Challenge: design and build a pinball machine	5	0	0	30	0
Family Robot Club	Family Robot Club Parent/Caregiver & Child for ages 5 and up Families come to the center to build robots together that they can bring home. Families will learn concepts like mechanics, engineering and electricity while having fun. We will have on hand several robot kits, gears, motors and more to play with for inspiration,	3	50	150	5	750
Girls Robot Club	Girls Robot Club for ages 7 and up Girls come to the center to build robots that they get to bring home. Students will learn concepts of mechanics, engineering and electricity while having fun. We will have on hand several robot kits, gears, motors and more to play with for inspiration,	3	30	90	5	450
Professional Development I	Professional Development Educators from around the city come together to learn from experts in the STEM field on curriculum development and ways to engage children in the classroom with innovative STEM activities and lesson plans they can bring back to their schools. Educators will learn-by-doing and gain exposure to cutting-edge technologies like 3D printers, coding, and electronics. Educators will be able to bring back their classes to our center for field trips. Some topics we will cover include: <ul style="list-style-type: none"> • Project-based learning • Product Design Process • Teaching math through games • Computer programming 	1	60	60	5	300



# of Students	Total Revenue	Cost of Materials	# of Staff	Session Hours	Hourly Cost of Staff	Total Staff Cost	Total Costs	Weekly Rev (low)	Weekly Rev (high)	Weekly Profit (low)	Weekly Profit (high)
30	12000	50	1	1	30	300	350	800	1200	765	1130
30	12000	50	1	1	30	300	350	800	1200	765	1130
30	0	200	3	3	22	990	1190	0	0	1190	1190
10	1500	40	1	1.5	22	99	139	250	500	204	407
12	1080	40	1	2	22	132	172	150	360	93	245
25	1500	80	1	2.5	40	100	180	300	1500	120	1320



	Description	# Sessions	Tuition per Session	Total Tuition	# of Students	Total Revenue
Professional Development II	<p>Professional Development</p> <p>Educators from around the city come together to learn from experts in the STEM field on curriculum development and ways to engage children in the classroom with innovative STEM activities and lesson plans they can bring back to their schools. Educators will learn-by-doing and gain exposure to cutting-edge technologies like 3D printers, coding, and electronics. Educators will be able to bring back their classes to our center for field trips. Some topics we will cover include:</p> <ul style="list-style-type: none"> • Project-based learning • Product Design Process • Teaching math through games • Computer programming 	1	60	60	5	300
Parents Night Out	<p>Parents Night Out</p> <p>This Friday, drop-off your child for a night of exploring, building, and playing while learning engineering and math concepts while you go out on a date.</p>	1	50	50	5	250
Intro to 3D Printing	<p>Intro to 3D Printing for all ages</p> <p>This 3-hour beginner class is an introduction to the 3D software you can use to create your own designs and an overview of 3D printing. You will experience a 3d printer in action, learn about printing materials and take home a 3D printed object.</p>	1	65	65	5	325
School Field Trip I	<p>School Field Trip</p> <p>We offer hands-on inquiry-based science, math and technology workshops, which are correlated to New York City and New York State Standards. Our makerspace is a learning environment where school groups and teachers can tinker, design and create together. Everyday materials are reused in exciting ways that encourage experimentation and collaboration to develop 21st-century skills.</p>	1	15	15	20	300
School Field Trip II	<p>School Field Trip</p> <p>We offer hands-on inquiry-based science, math and technology workshops, which are correlated to New York City and New York State Standards. Our makerspace is a learning environment where school groups and teachers can tinker, design and create together. Everyday materials are reused in exciting ways that encourage experimentation and collaboration to develop 21st-century skills.</p>	1	15	15	20	300
Adult Makerspace I	<p>Adult Makerspace</p> <p>Bring in a project of your own to work on in our fully-equipped space or follow a weekly series of topics including designing a video game, creating an interactive website, building a robot or creating an animation.</p>	1	39	39	10	390
Adult Makerspace II	<p>Adult Makerspace</p> <p>Bring in a project of your own to work on in our fully-equipped space or follow a weekly series of topics including designing a video game, creating an interactive website, building a robot or creating an animation.</p>	1	39	39	10	390

# of Students	Total Revenue	Cost of Materials	# of Staff	Session Hours	Hourly Cost of Staff	Total Staff Cost	Total Costs	Weekly Rev (low)	Weekly Rev (high)	Weekly Profit (low)	Weekly Profit (high)
25	1500	80	1	2.5	40	100	180	300	1500	120	1320
20	1000	30	1	3	22	66	96	250	1000	154	808
20	1300	30	1	3	15	45	75	325	1300	250	1150
35	525	40	1	2	22	44	84	300	525	216	357
35	525	40	1	2	22	44	84	300	525	216	357
35	1365	40	1	2.5	22	55	95	390	1365	295	1175
35	1365	40	1	2.5	22	55	95	390	1365	295	1175



	Description	# Sessions	Tuition per Session	Total Tuition	# of Students	Total Revenue
Community Night	Community Night Join us to mingle and tinker with our local community including people of all ages. There is something for everyone with open experimentation with materials and technologies along with structured activities and speaker presentations. Some upcoming activities include inventing a game you build out of cardboard, programming robots to navigate mazes, using Makey Makey kits to control Scratch games you code yourself. We will partner with local restaurants to provide food for purchase. This week we have a guest speaker on Biorobotics who will show examples of robots that emulate biological organisms. After a brief discussion, you will play with materials and Lego WEDO kits to produce designs based on nature.	1	10	10	10	100
Breakfast Bytes	Start your day energized and full of new ideas and connections. Enjoy breakfast and the opportunity to mingle with other attendees. These meetings are a mix of networking and speaker presentations.	1	10	10	10	100
Science and Technology Showcase	Science and Technology Showcase We invite the community in to see the amazing work that we do here at the center. Students enrolled in our programs will showcase their work and will also run workshops for attendees. Families can participate in STEM activities such as Domino Demise, where they will learn about the potential energy stored in dominoes, the physics of how dominoes fall, different set up patterns and how the measured distance affects the speed of falling.	1	5	5	30	150
Team Building	Team Building Bring your group to our space for fun and unique team events. Your team will collaboratively design, build and decorate a collection of robots, and learn about circuitry and robotics. After a friendly robot battle, each person can take home the robots they created. We can accommodate parties of 5-30 people. Events typically run from 6:30-8:30 pm. We can provide food at an additional cost or you can bring your own.	1	60	60	9	540
Special Events + Birthday Parties	Adult Birthday Parties Birthday party topics to choose from include Science, Engineering and technology partner with restaurants.	1	800	800	8	800
Special Events + Birthday Parties	Youth Birthday Parties Birthday party topics to choose from include Science, Engineering and technology partner with restaurants.	1	800	800	8	800
Program Manager						
Digital Media Provider	Website creation and updates					
Costs of Space	Rent, Cable, Electricity, HVAC and other expenses					
					449	

# of Students	Total Revenue	Cost of Materials	# of Staff	Session Hours	Hourly Cost of Staff	Total Staff Cost	Total Costs	Weekly Rev (low)	Weekly Rev (high)	Weekly Profit (low)	Weekly Profit (high)
45	450	10	1	3	15	45	55	100	450	45	340
25	250	40	1	1	22	22	62	100	250	38	126
100	500	0	1	2.5	15	37.5	37.5	150	500	112.5	425
35	2100	50	1	2	22	44	94	540	2100	446	1912
20	1040	50	1	3	15	45	95	800	1040	705	850
20	1040	50	1	3	15	45	95	800	1040	705	850
						1442	1442	0	0	1442	1442
						500	500	0	0	500	500
							2888	0	0	2888	2888
1049		1850		73		10489	15226	\$15,027	\$35,156	\$6,650	\$24,781



Hiring Plan

	Monday	Tuesday	Wednesday	Thursday
Hiring Plan	One staff member to oversee adults and children from 8-3	One staff member to teach Professional Development and children 8-3	One staff member to lead Breakfast Bytes and School Field trips from 8-3	One staff member to teach Website Design and App Development and children from 8-3
	One staff member to teach Scratch, Minecraft and Entrepreneur from 6-9	One staff member to teach Adult Makerspace from 6-9	One staff member to lead Community Night from 6-9	One or two staff members to lead the Team Building event from 6-9



Friday	Saturday	Sunday	
One staff member to teach Website Design and App Development and children from 8-3	One staff member to teach Professional Development and other courses	One staff member to teach Computer classes	Program Manager and Digital Media Provider
One or two staff members to run Parents night out from 6-9	Two staff members to run Science Showcase and Parties from 1130 to 9		

