Google Change The Game Entry, Mathurah Ravigulan, 16 years old

## SPACE ADVENTURES: Embark on a journey discovering the world of science and technology around you!

The process:

| Ideation | Sketching | Wireframing | Interface Design |

I first started with different "How Might We" questions to start off the design process.
As a young aspiring female in tech, I noticed that most games for girls were dress up games. I dealt with this when I was growing up. One of the main issues is that girls usually lose interest in STEM subjects early on, which prevents them from pursuing technology in the future.
My "How Might We Question" for the Google Design Challenge turned into –
"How Might We make a game that is fun, challenging, and sparks an interest in STEM?

Figure 1, Sketch of game designs
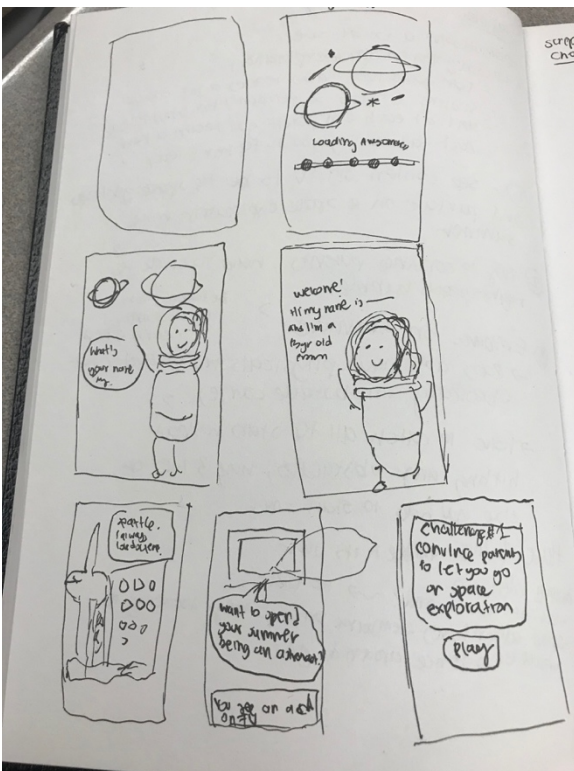
On the left is a picture of some designs in my design notebook. I'm quite an entrepreneurial person thus every time I get an idea I always sketch it out In my notebook. I wanted to have a story behind my game, so I sketched out each screen, wireframed them, and soon brought them to life with my designs.

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Main Character

Meet the main character.

She is 13 years old, loves science and wants to learn more about Earth and Space. The player has the option to name the character to give them customization as well as an emotional connection to the game. Could also give options in the future to customize the look of the character.
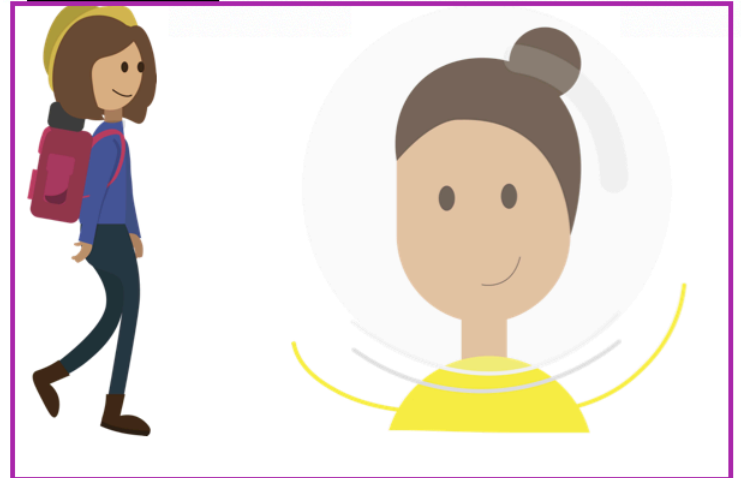
Software

I used Adobe Illustrator and made all the graphics myself! I love designing and being creative. I taught myself how to use Adobe Illustrator and had experience using it before when designing for my school's newspaper and other projects.
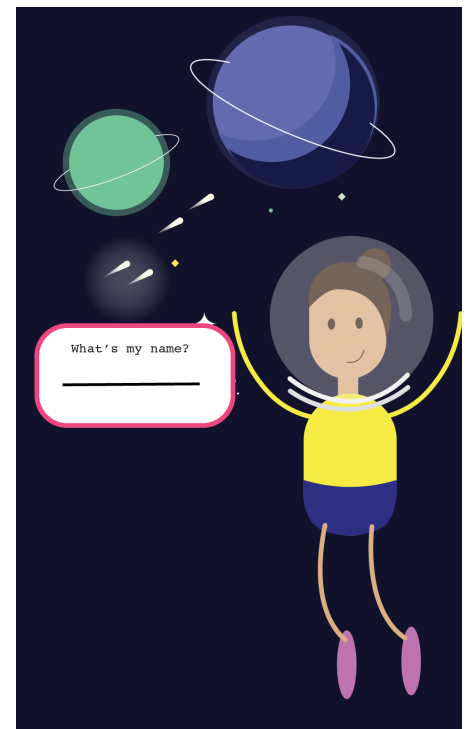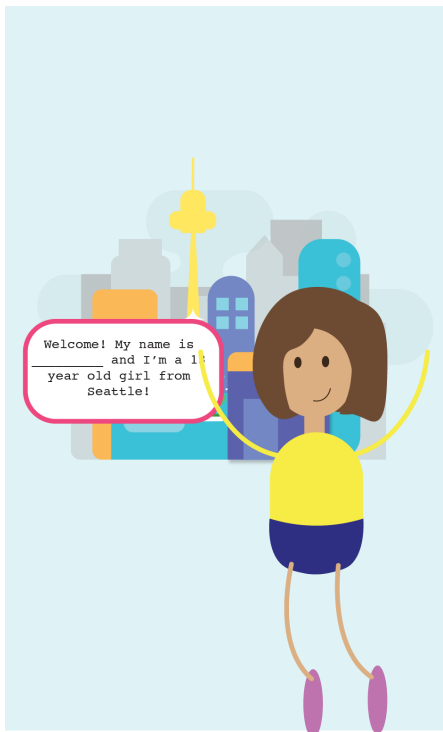
Screens

First screen that appears when you open the game. Fun visuals, call to action that gets the user to play!

Loading state of the game. Every game has to have a loading state! This says "Loading Awesomeness" which gets the player excited
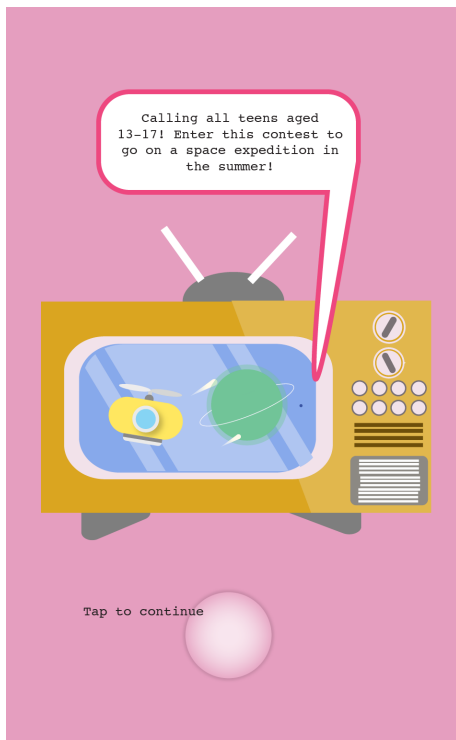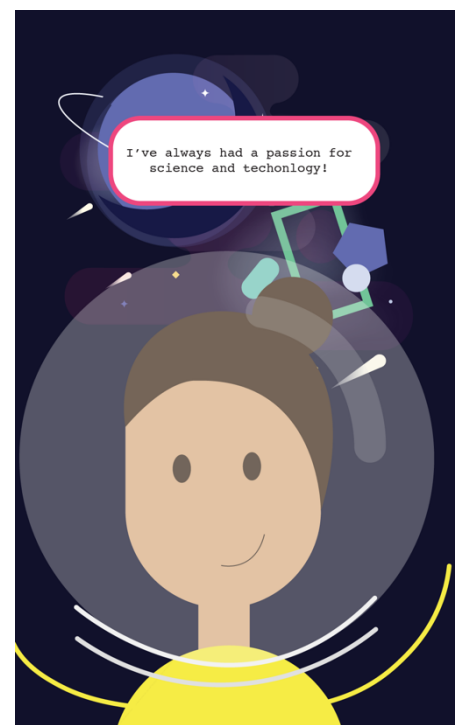
Before the game starts, the user has a chance to name the character.

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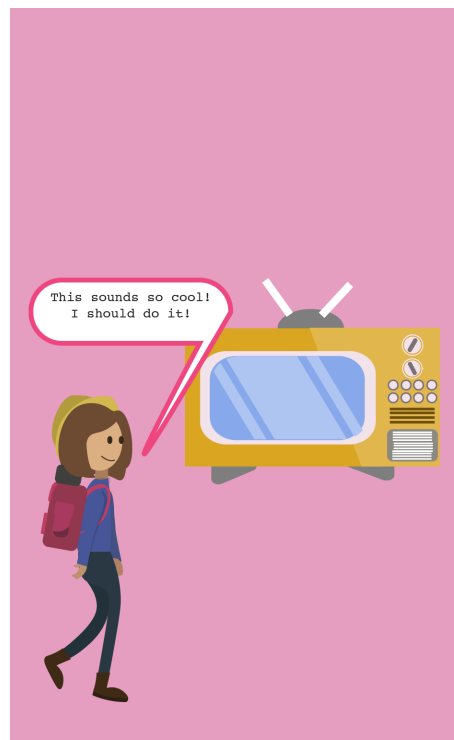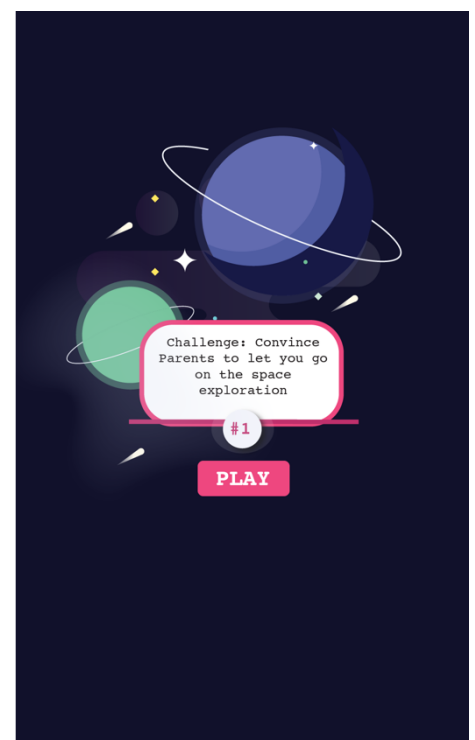

Character goes through her story!

These screens are mobile optimised, the user taps to continue to the next part of the story. Can also be made into a desktop version!

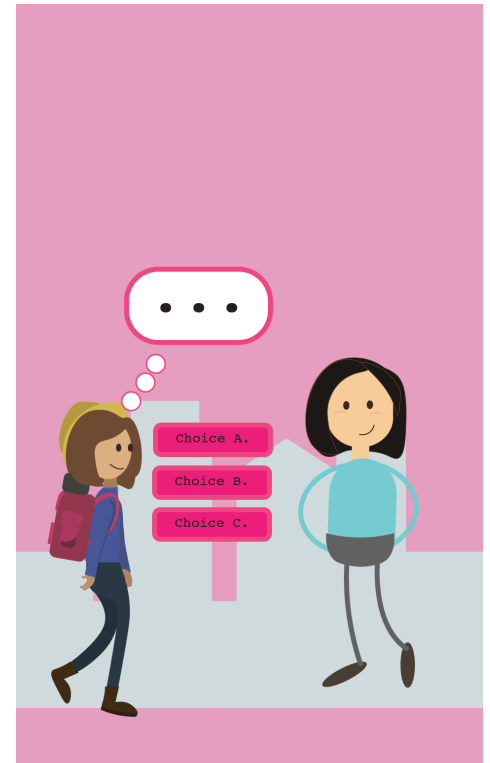Character sees an ad on TV about a space exploration!


This story leads up to what happens next

First challenge of the game is to convince parents to go on space exploration.

Character has a conversation with her mom to get permission to go on the space exploration. The choices aspect of the game gives the player a chance to do some role-play. Each choice would lead to a different outcome. The right response is the one that is mature, kind, teaching the players about respect and maturity. When the player picks the right response, they would go to the next challenge -raising money for the space exploration.

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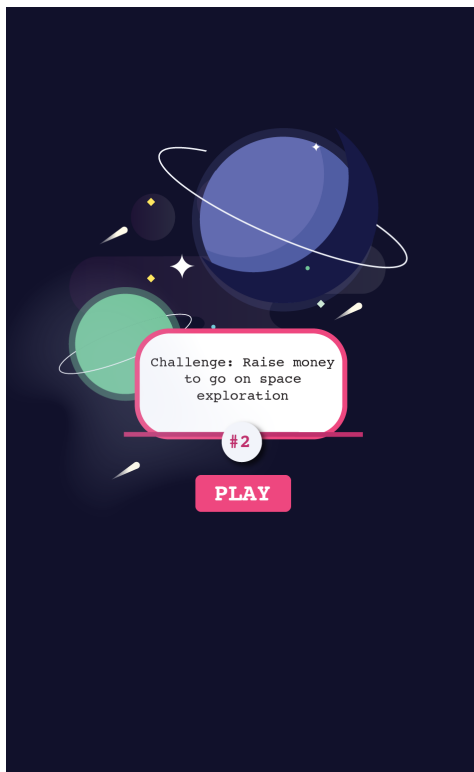
The second challenge is a
financial literacy challenge to
save money for the space
exploration.
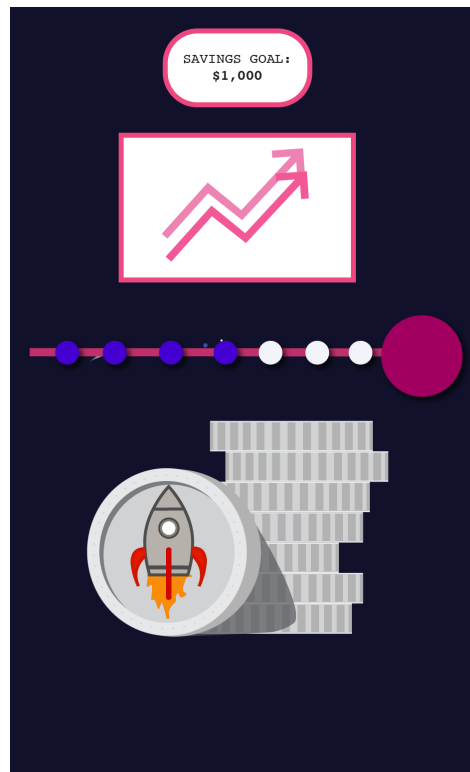
Here the player tries to earn
and save rocket coins until
they reach their goal! This
teachers users the importance
of saving and financial literacy.
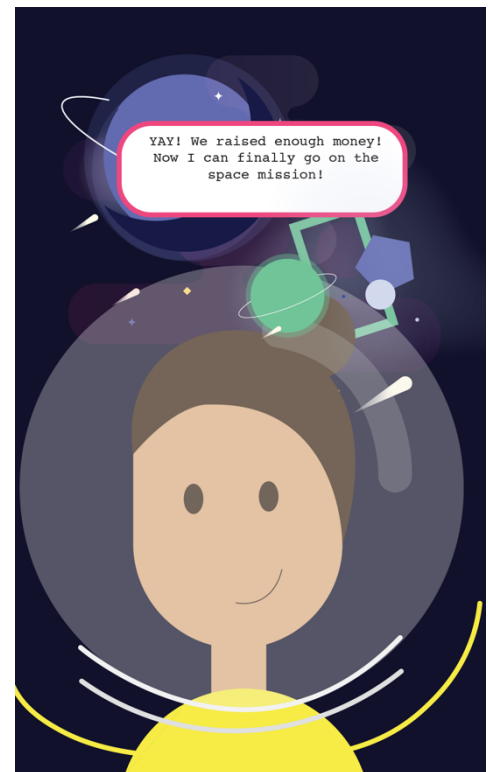
Success screen when the
player saves enough money
for the exploration.
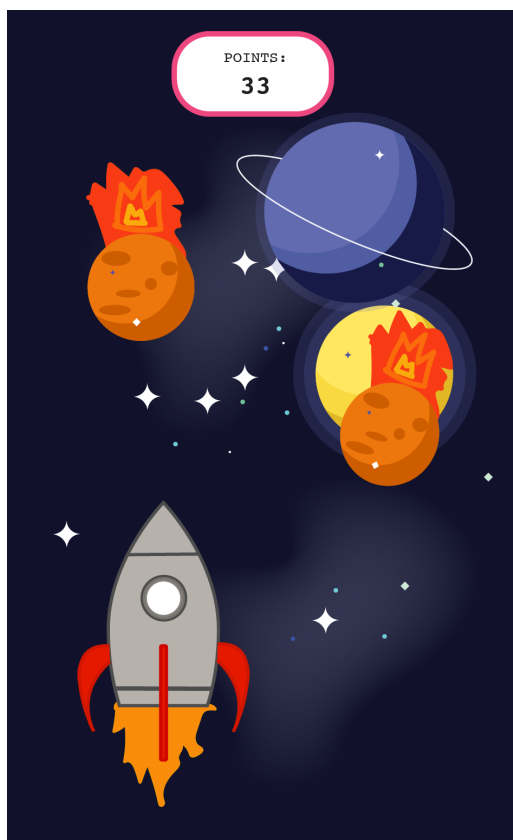
This is the most fun part of the game! The player is finally
past the main challenges and is on the space exploration.
They are driving the rocket ship (moves with finger or
mouse) and they have to try to catch all the stars. They
have 3 lives. Hitting a meteor/obstacle will cause the player
to lose a life. If they lose all three lives they'll have to start
over.

Each level is timed and catching stars allows a player to gain a point. The scores will be put on a leaderboard and players will receive badges (gamification) for different milestones. Ex. Finishing the first challenge, getting the most stars and they can view their badges on their home screen of the app.

At the end of each level, a new science fact is on the screen! This allows the players to learn a little more about science while playing a fun game. Different facts from the meaning of gravity, the planets, and further resources can be shared to their parents email on how they can get involved in science.