



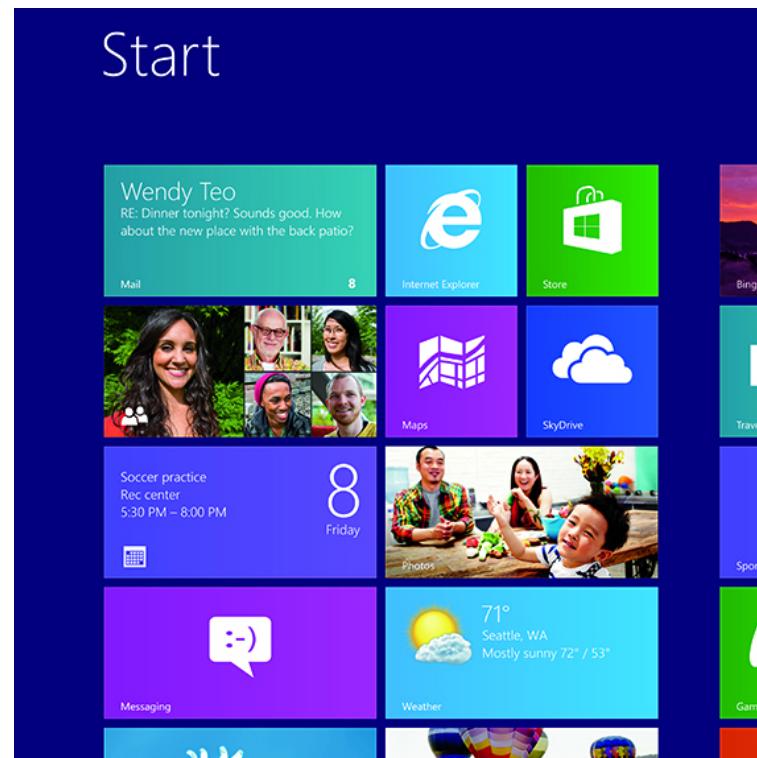
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THE PROBLEM:

In today's society, **programming** is an incredibly useful skill to have regardless of what industry a person is in. With the advent of Scratch, Kudo, and other coding games, children are being introduced to concepts such as **logical thinking** and **sequential thought** at a young age. However, most programming games are targeted at kids 10+ because of the innate difficulty level of writing code.

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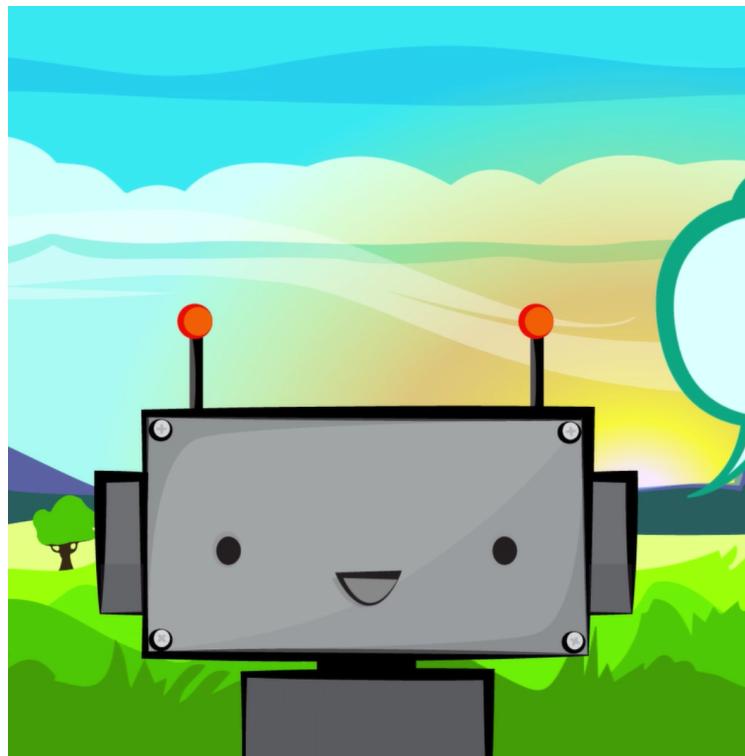


THE PROBLEM:

At the Microsoft Foundry, our team's task was to create a Windows 8 application that:

1. is an **educational game**
2. teaches **programming concepts**
3. targets children **3 - 11**

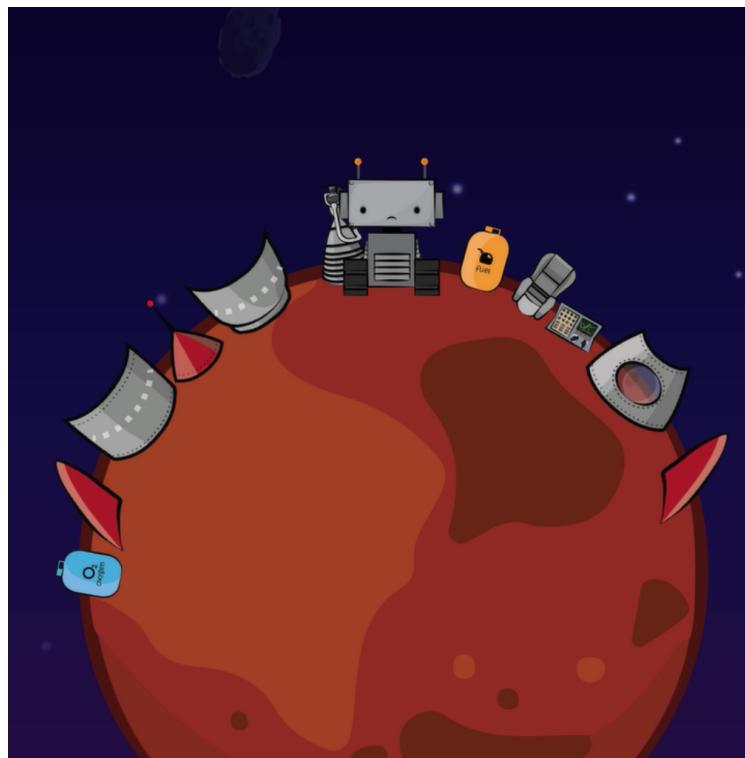
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THE SOLUTION: A PLATFORMER GAME WITH A SPIN

- 1. Engaging storyline about a robot named Codey who is traveling through the solar system**
2. Codey crashes his rocket on every planet, so the child needs to “program” him to find the rocket pieces
3. Planets get progressively harder, and introduces concepts such as looping and states

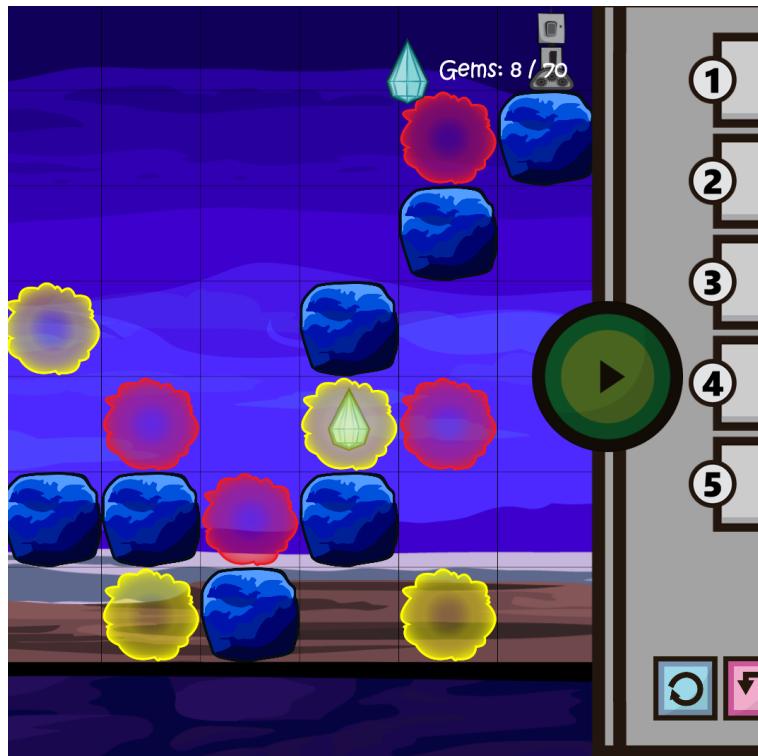
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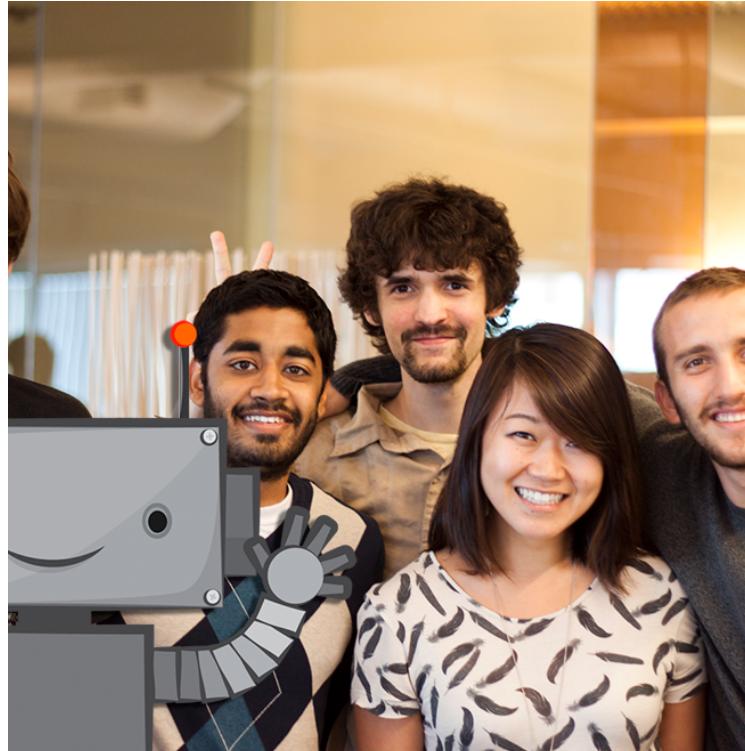
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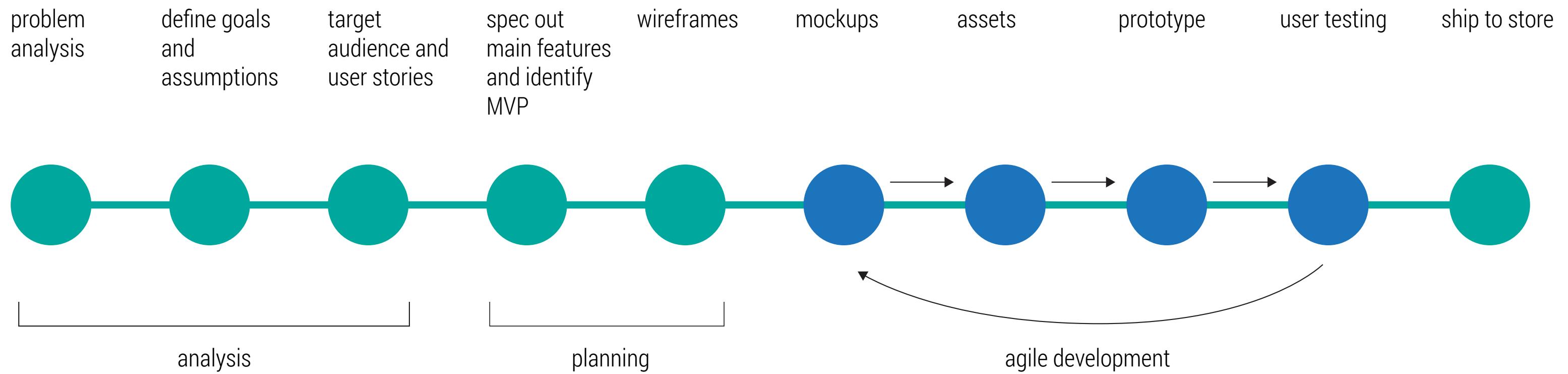
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MY ROLE: PROGRAM MANAGER/DESIGNER

1. Team consisted of 4 devs and 1 designer
2. Served as the **communicator** for the team - led sprint reviews, planning and gave demos in Seattle
3. Created feature specs and testing strategy
4. Created all visual **assets, videos, and animations**

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problem analysis

define goals
and assumptions

target audience and user stories

spec out main features and identify MVP

wireframes

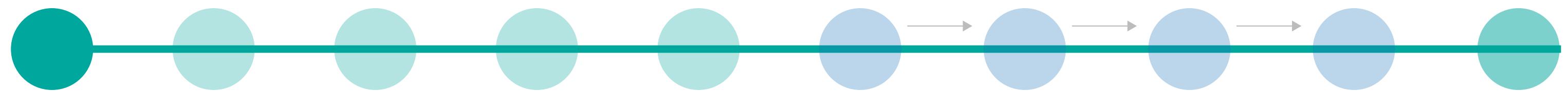
mockups

assets

prototype

user testing

ship to store



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analysis

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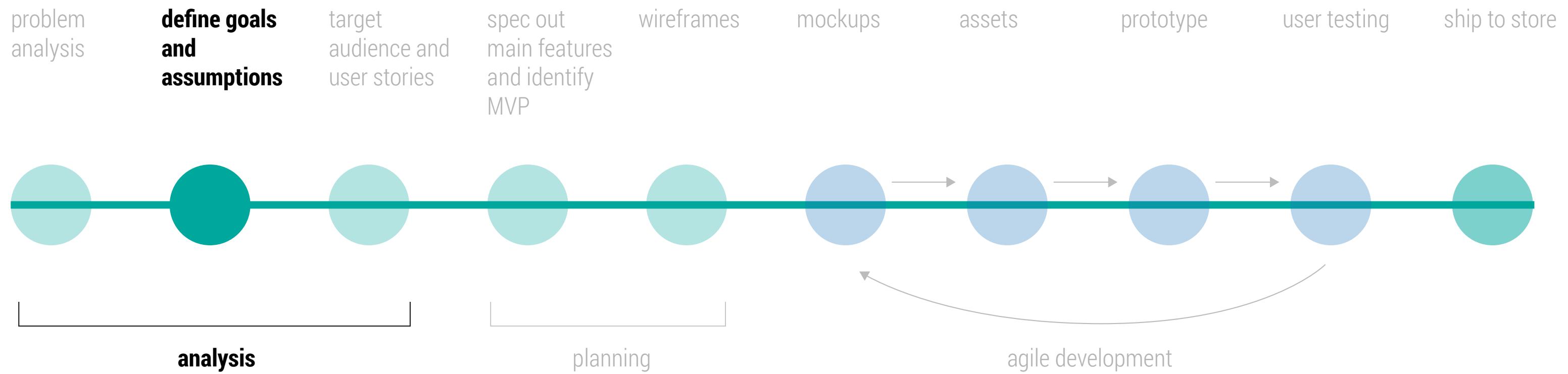
planning

agile development



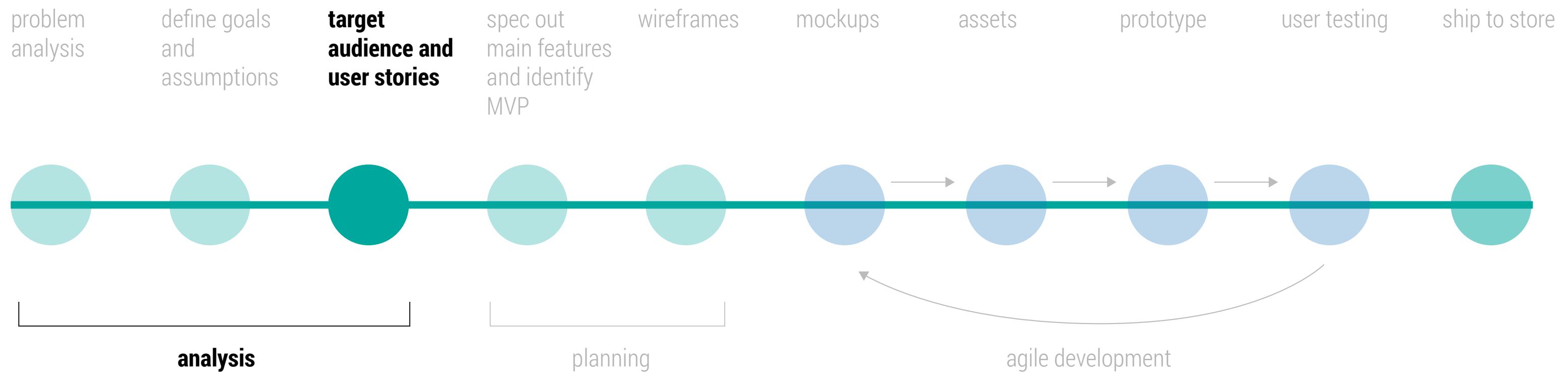
VS





GOAL: to build an app that creates an **entertaining environment**, promotes **logical thinking** and **introduces basic concepts associated with programming** for kids 3-10

ASSUMPTION: User owns a Windows 8 device



| Target Audience

Age : 3-11 years old + parents

Computer Literacy: Familiarity with basic touch navigation but limited typing experience

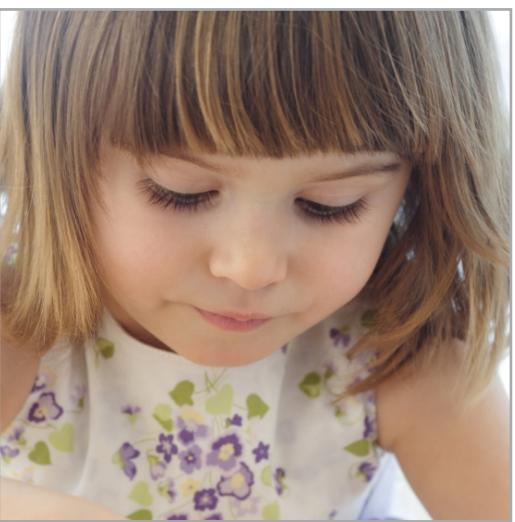
Socioeconomic Level: All socioeconomic levels, has parents/teachers who are invested in their education at such a young age

Educational Level:

3-4 years : No ability to read; ability to count.

4-7 years : Ability to read simple sentences and words

8-10 years : Ability to read larger chunks of text



JULIA, 3



NATE, 5



ANDY, 8



ALVIN, PARENT

| User Stories: Good

1. As children, Julia, Nate and Andy want to be able to interact with the game interface
2. As a toddler, Julia wants colorful graphics to keep her engaged
3. As a toddler, Julia wants a simple interface so it doesn't confuse her
4. As a toddler, Julia wants a fun game that teaches her how to play in very easy steps
5. As a young child, Nate wants to be able to avoid obstacles and collect coins and other "awards"
6. As a young child, Nate wants to be able to redo things over again
7. As an older child, Andy wants to be able to pick up where he left off last time so he doesn't have to play levels over again
8. As an older child, Andy wants to be able to fit long lines of commands within the window
9. As a parent, Alvin is interested in having his kids learn logical thinking
10. As a parent, Alvin wants to keep his children entertained with minimal involvement
11. As children, Julia, Nate and Andy want to see smooth animations

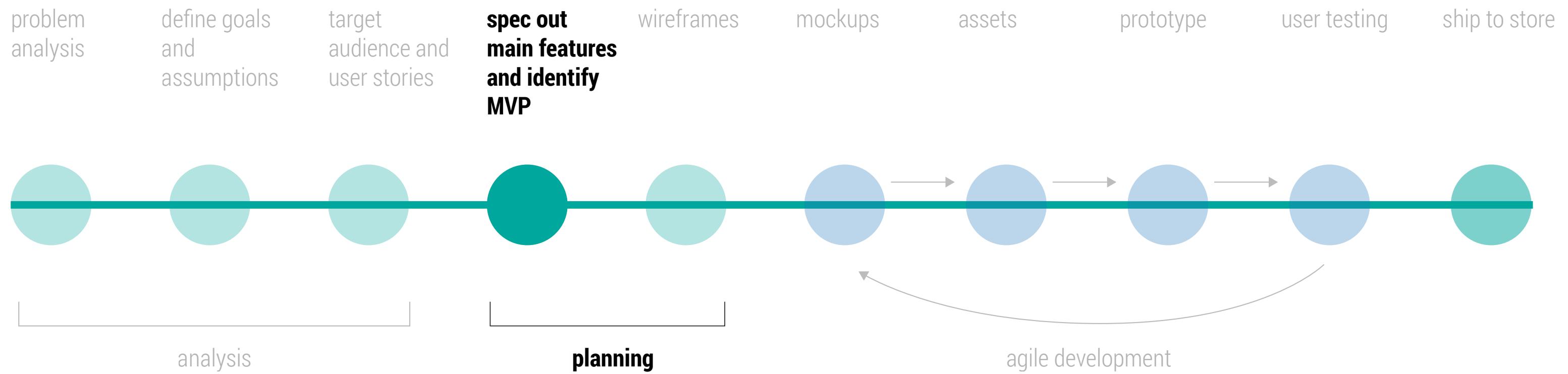
User Stories: Better

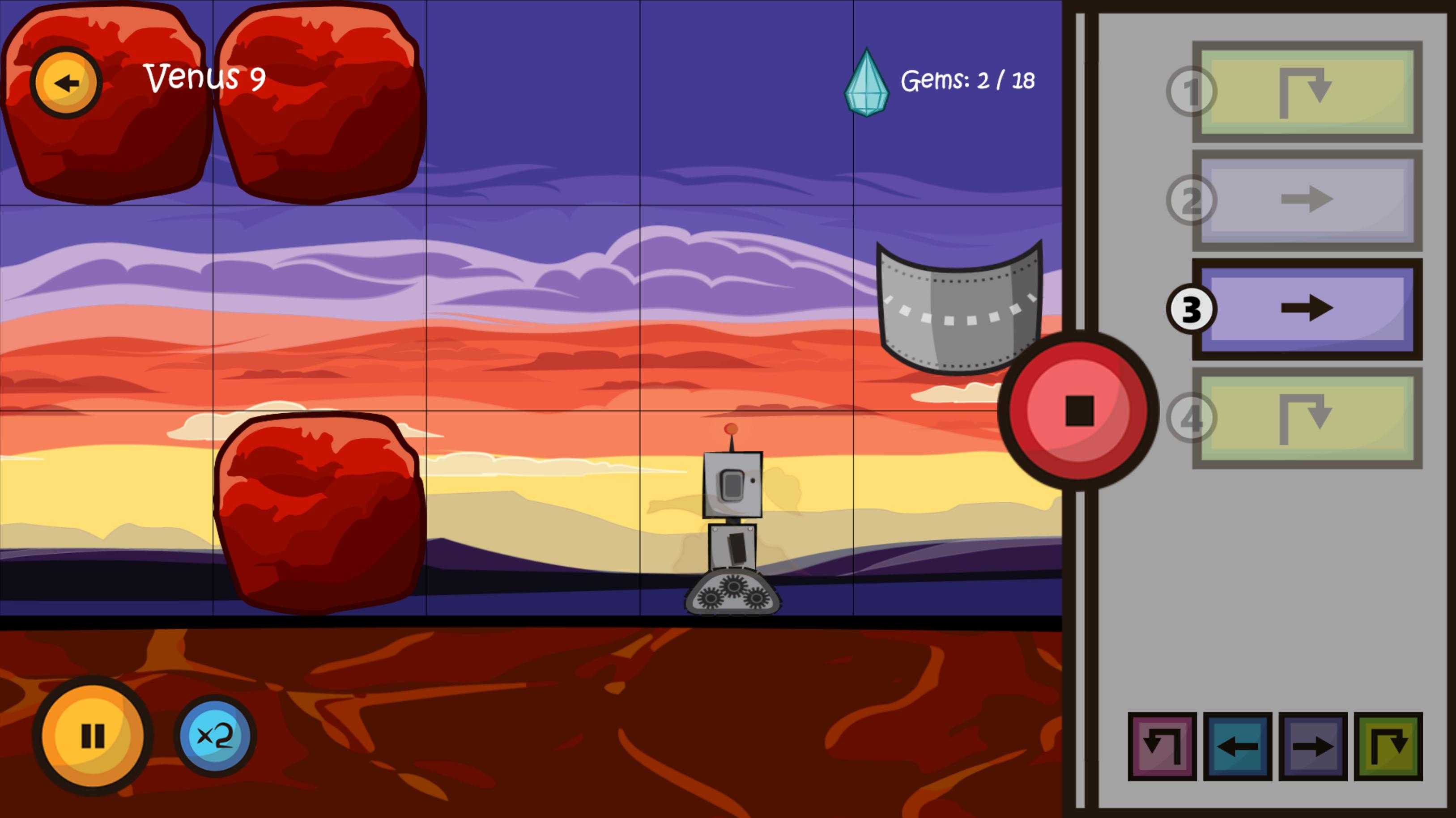
1. As children, Julia, Nate and Andy want to see funny effects during the game
2. As children, Julia, Nate and Andy want to see silly things happen at random on the game screen
3. As children, Julia, Nate and Andy want an entertaining introductory video
4. As a young child, Julie wants audio tutorials because she cannot read
5. As an older child, Andy wants to be able to skip to harder levels
6. As an older child, Andy wants to explore more complex programming concepts such as creating subroutines and adding "if" statements and loops

| User Stories: Best

1. As a parent, Alvin wants to be able to create custom levels for his children
2. As an older child, Andy wants to be able to share levels with his friends
3. As an older child, Andy wants to be able to make his own levels to challenge his friends
4. As children, Julia, Nate and Andy want endless levels to play



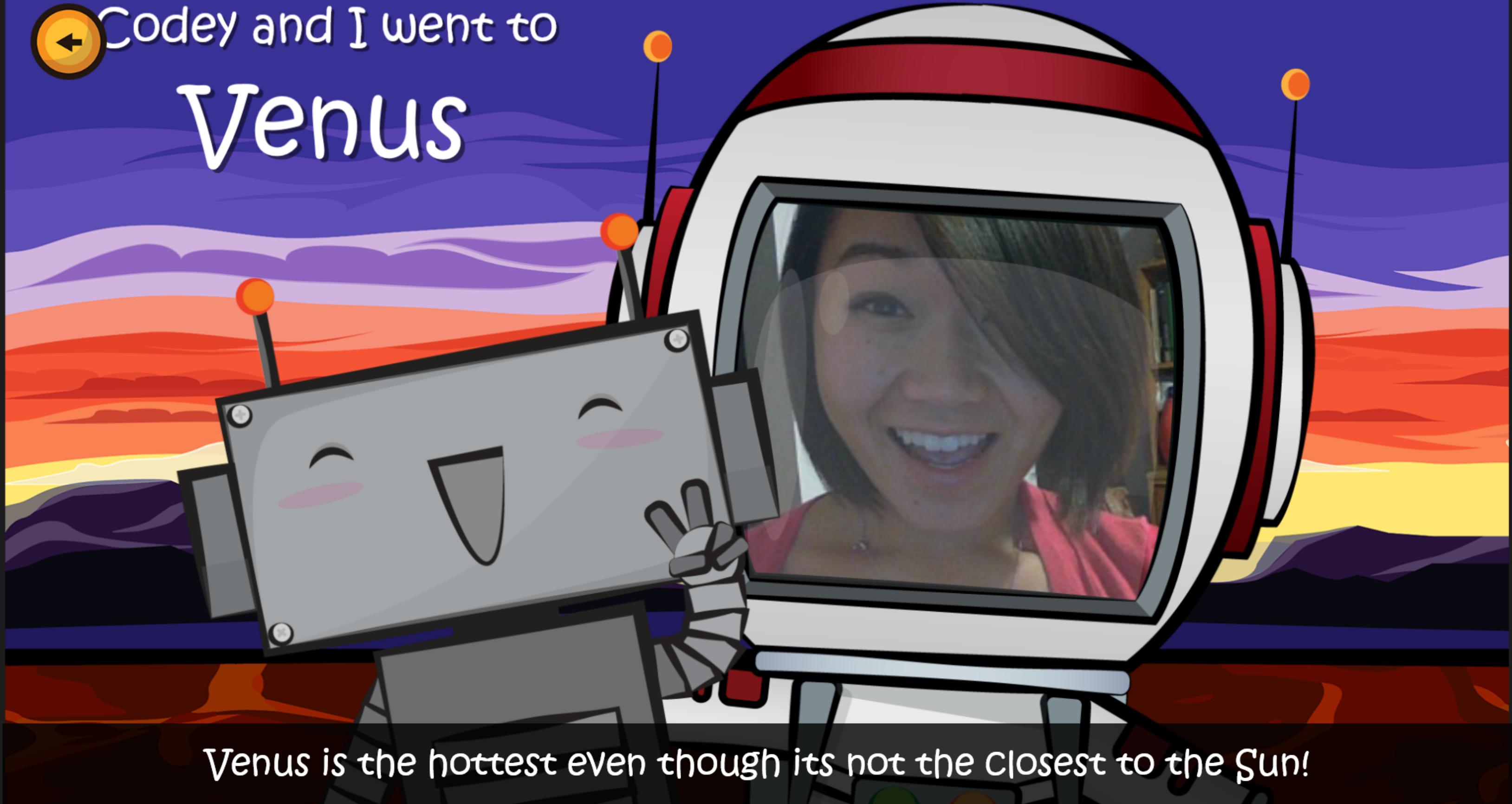




FEATURE 1: GAMEPLAY



Codey and I went to
Venus



FEATURE 2: TAKE A PICTURE AFTER BEATING 10 LEVELS



Gallery



FEATURE 3: GALLERY



help Codey put together
the inside of his rocket!

FEATURE 4: PUZZLE MINI-GAME AFTER EVERY 5 LEVELS



Tutorials



Intro

Looping

States

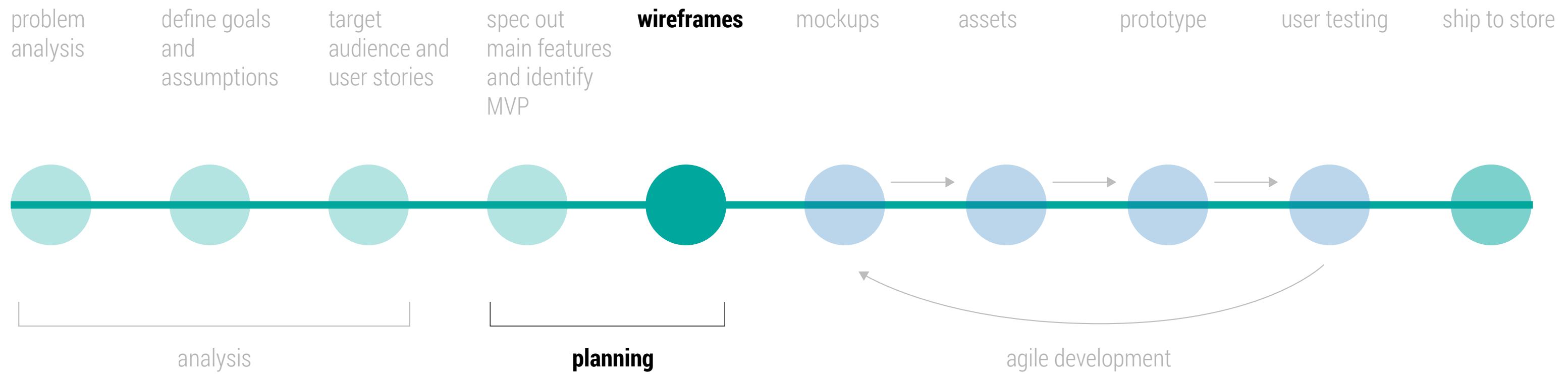
FEATURE 5: TUTORIALS



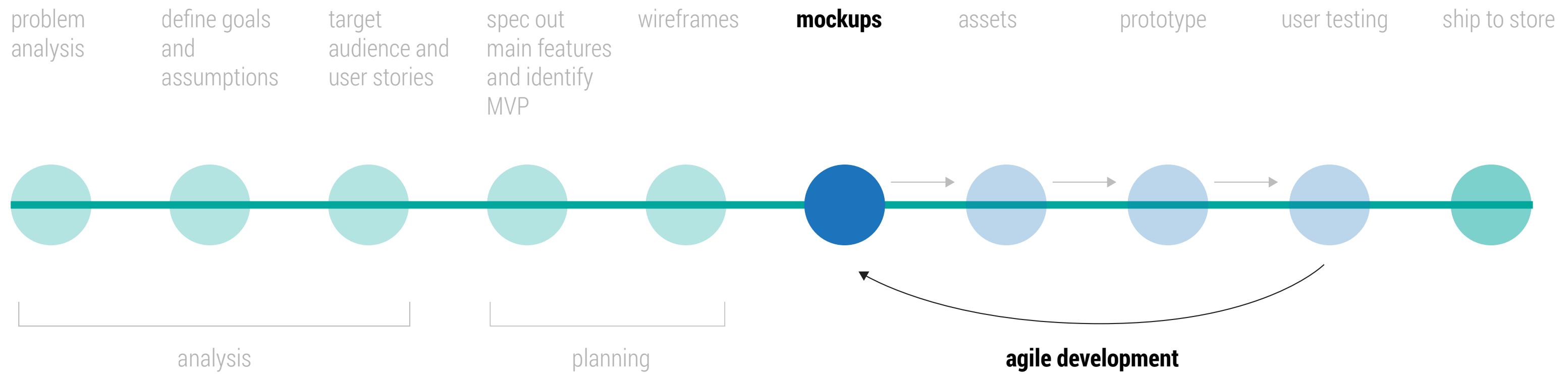
Neptune 2

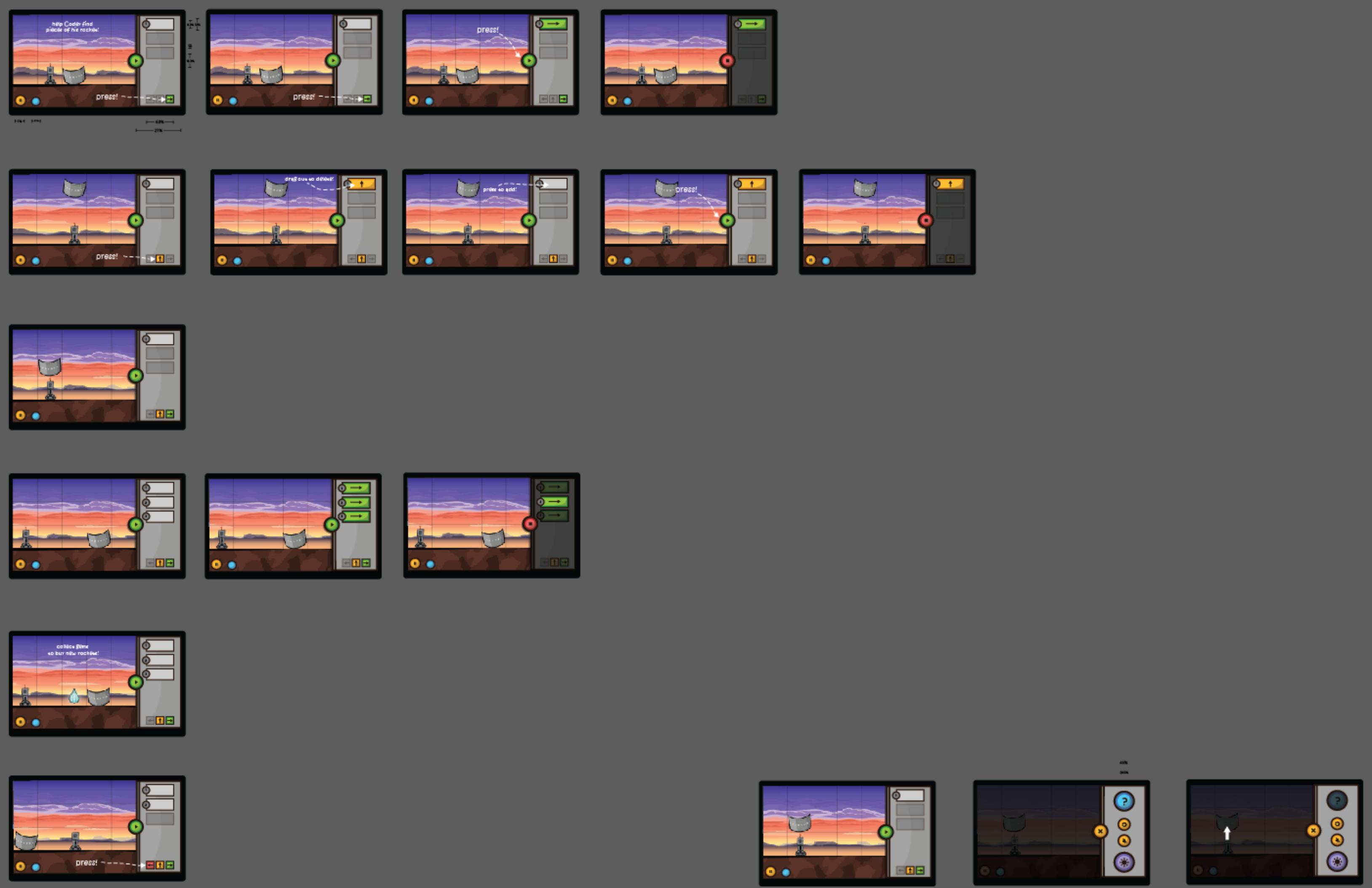


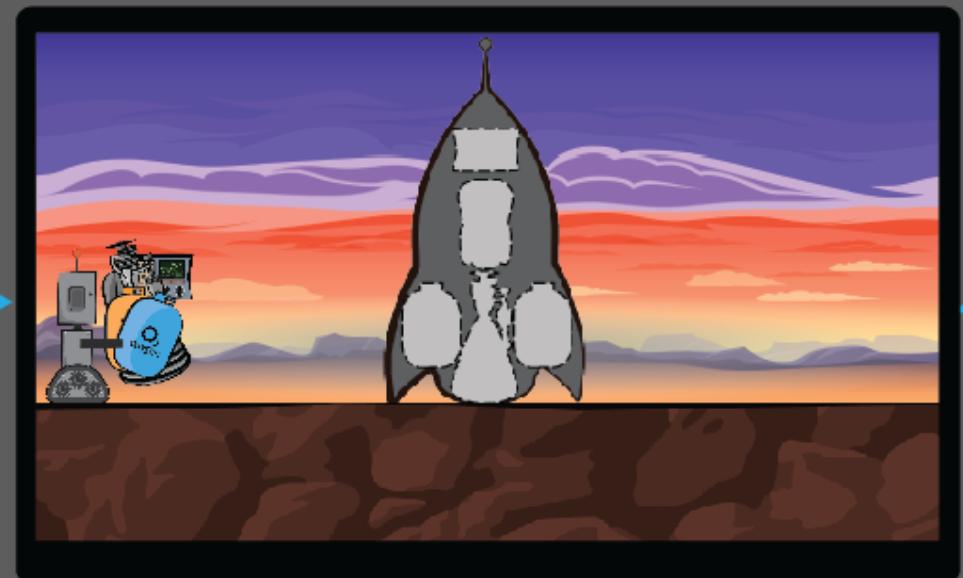
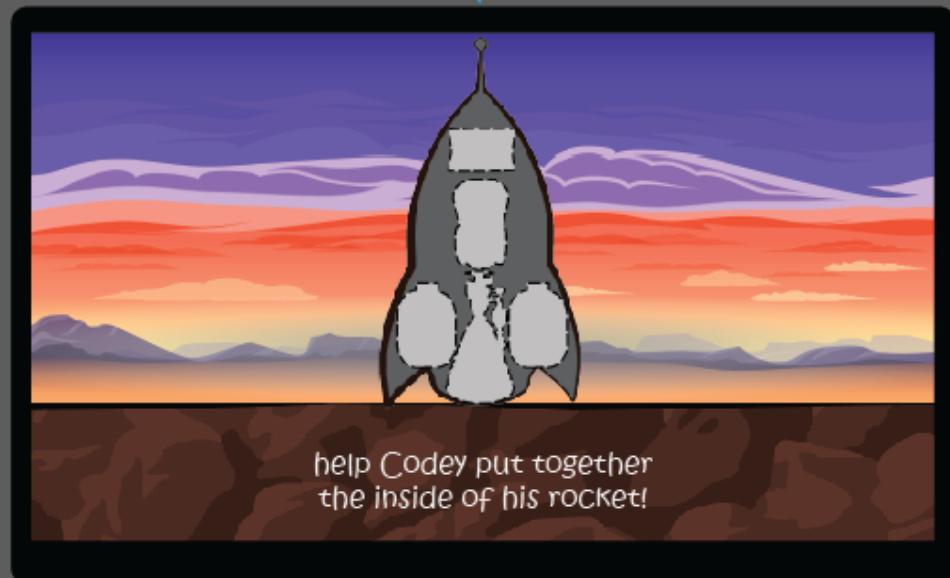
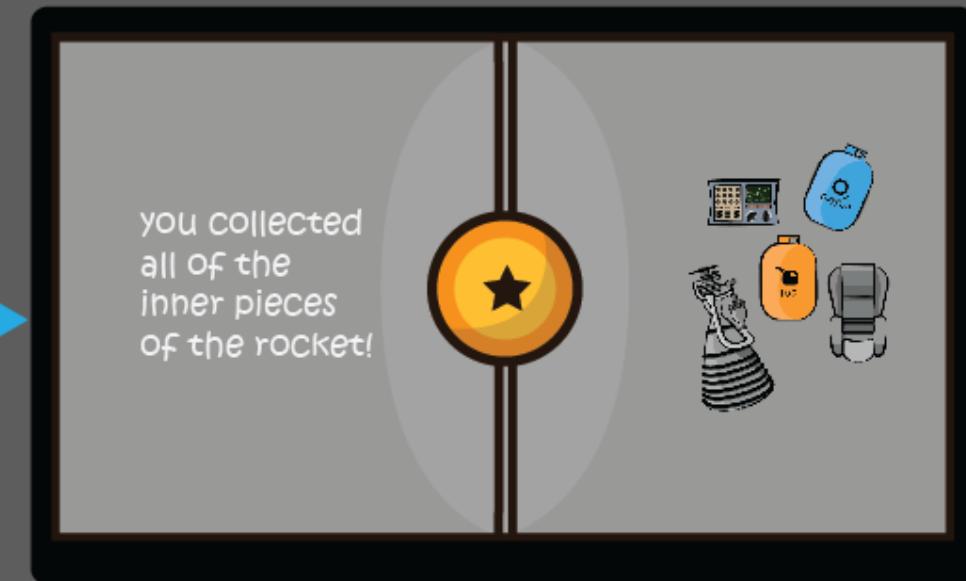
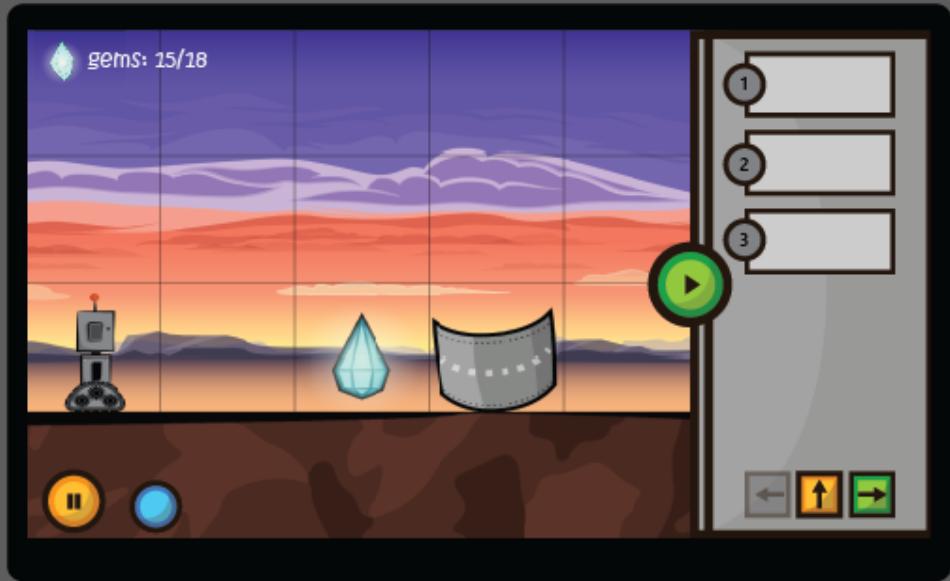
FEATURE 6: COMPLEX LEVELS WITH STATES AND LOOPING

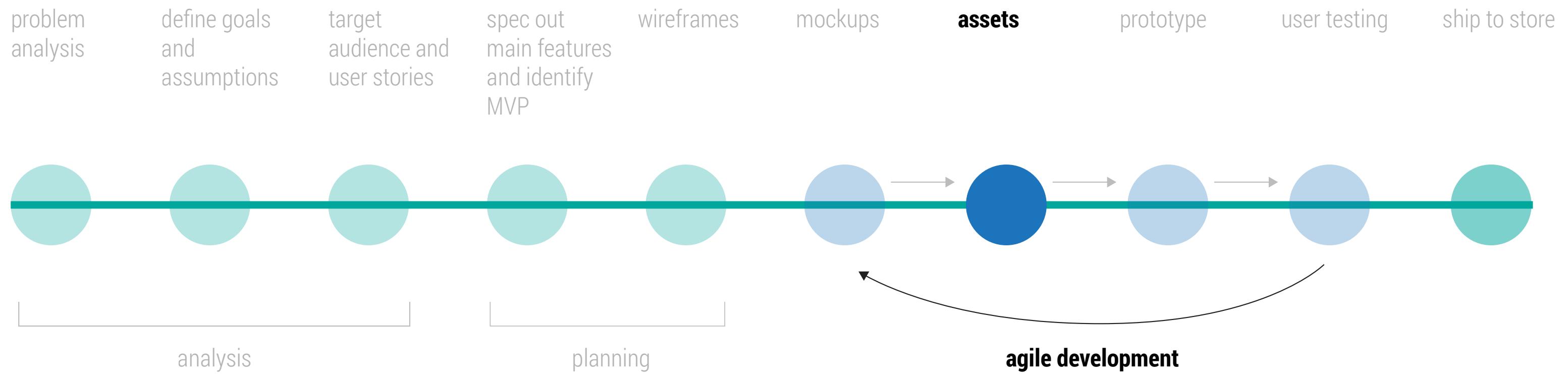


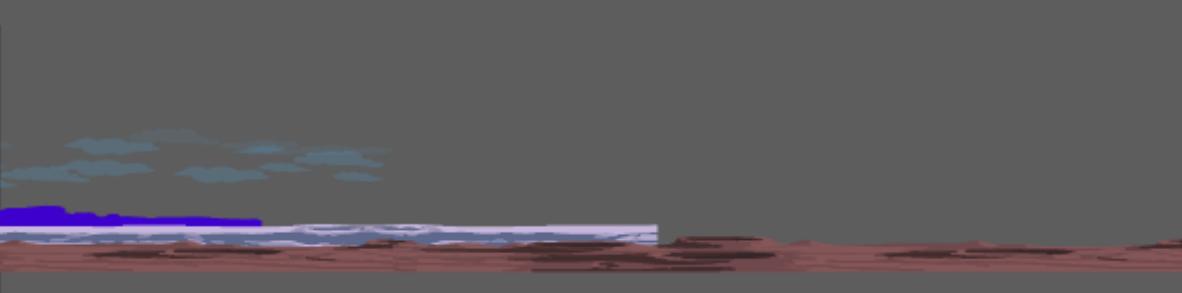
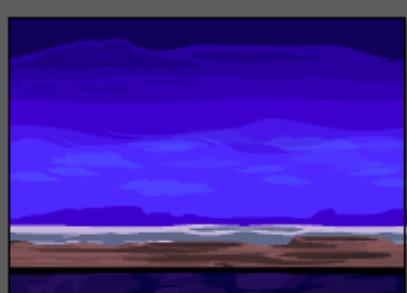
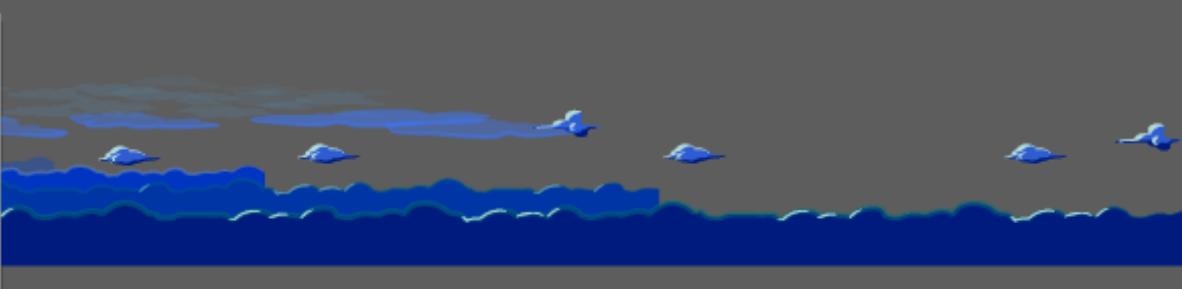
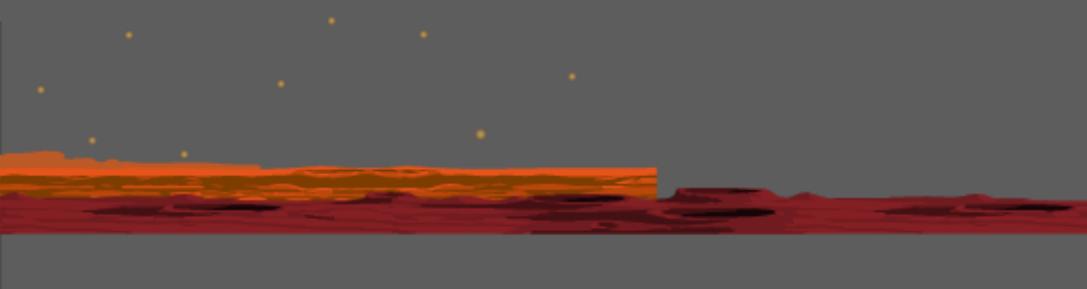
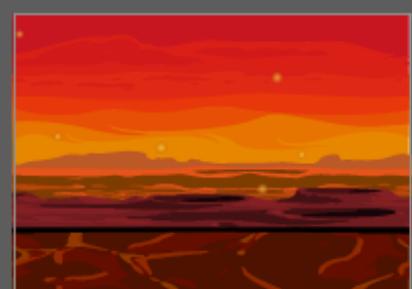
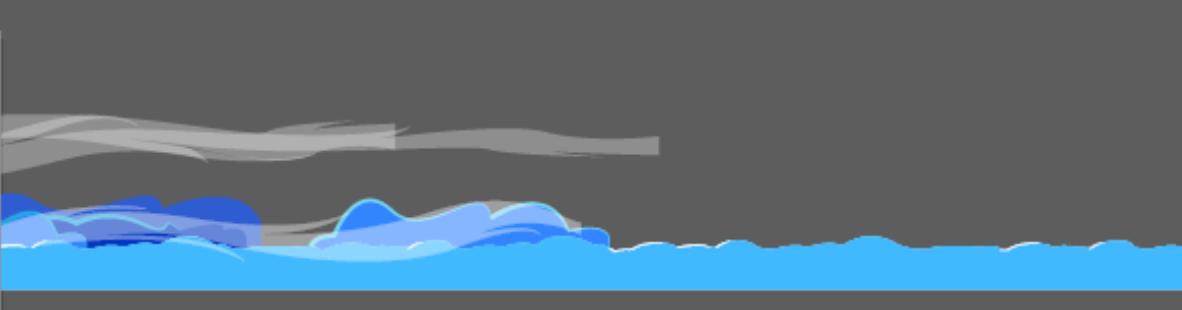
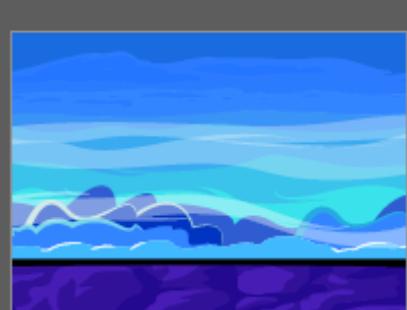
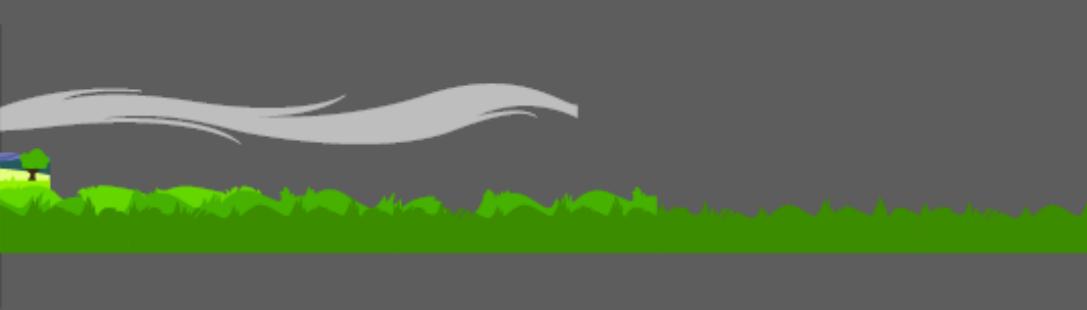
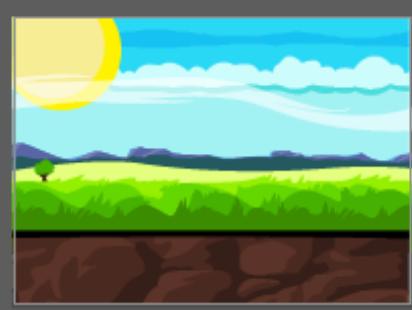
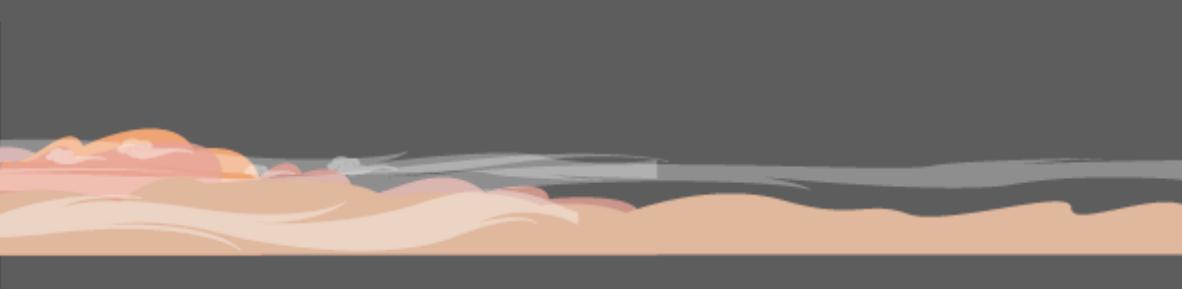
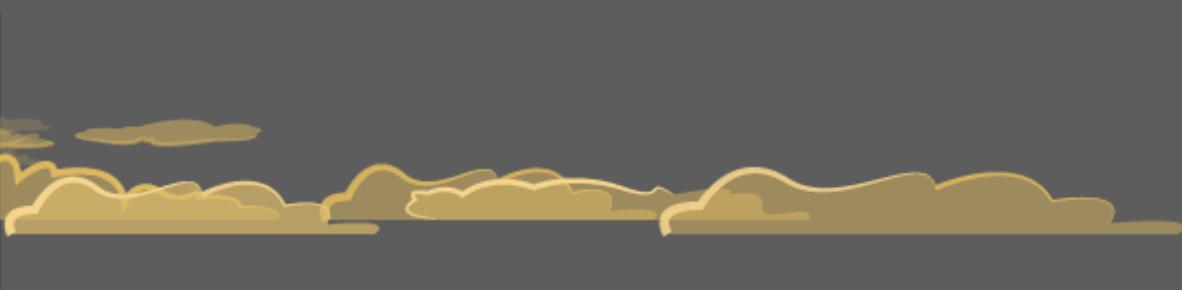
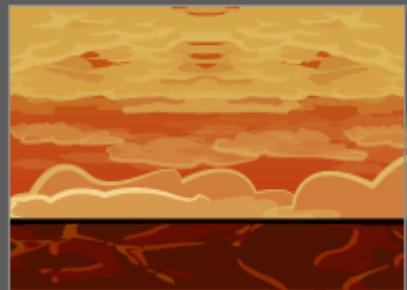
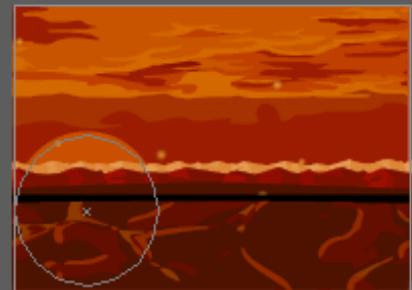


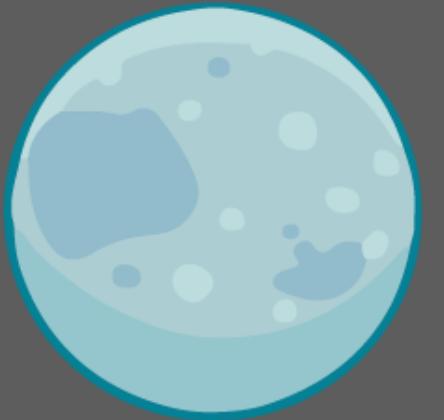
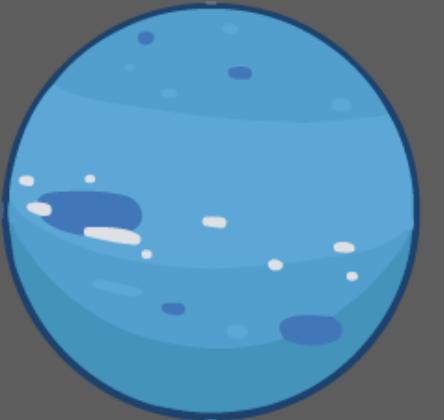
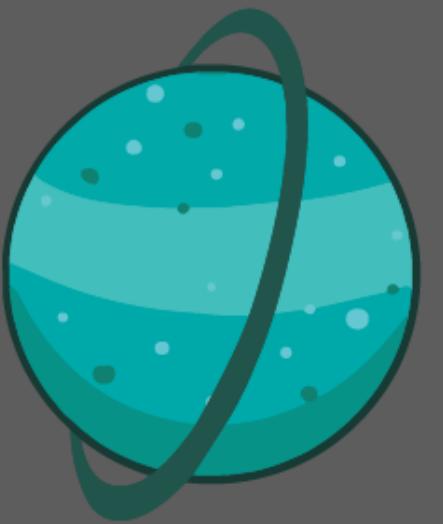




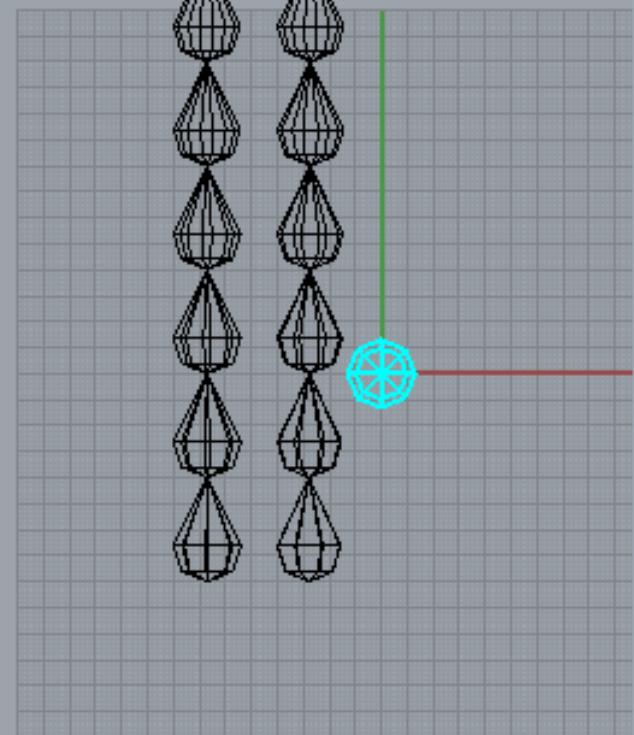
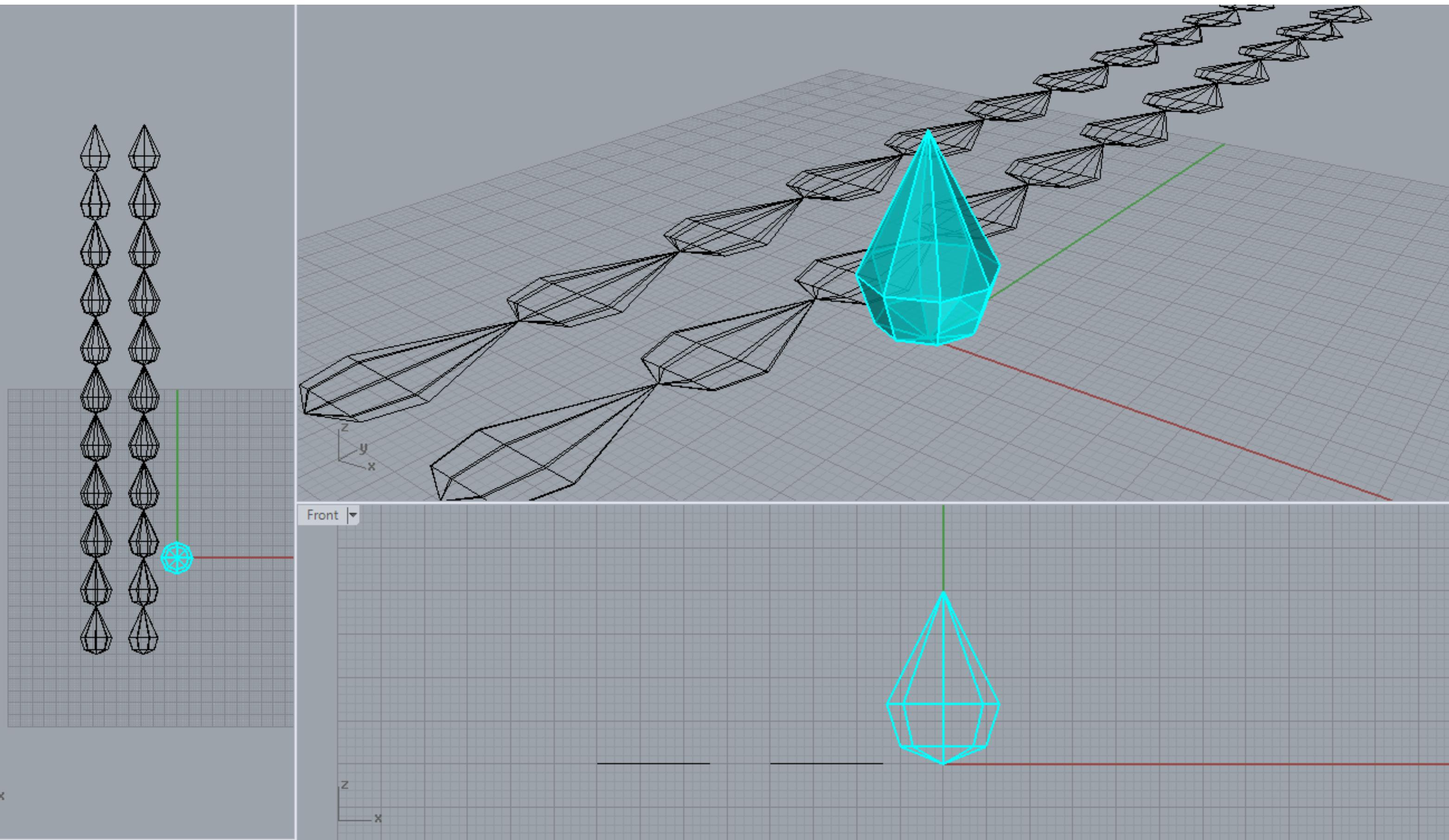








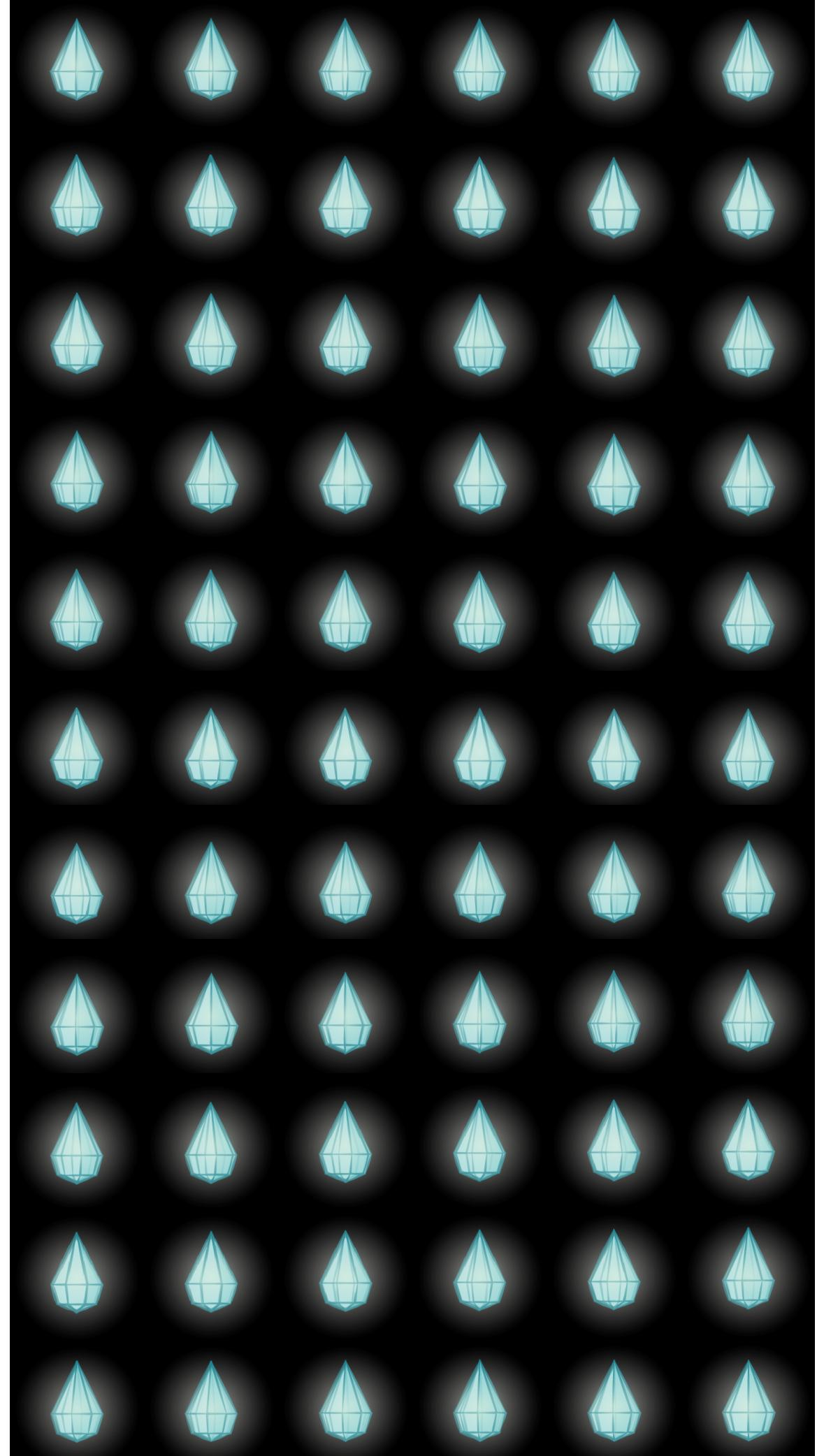


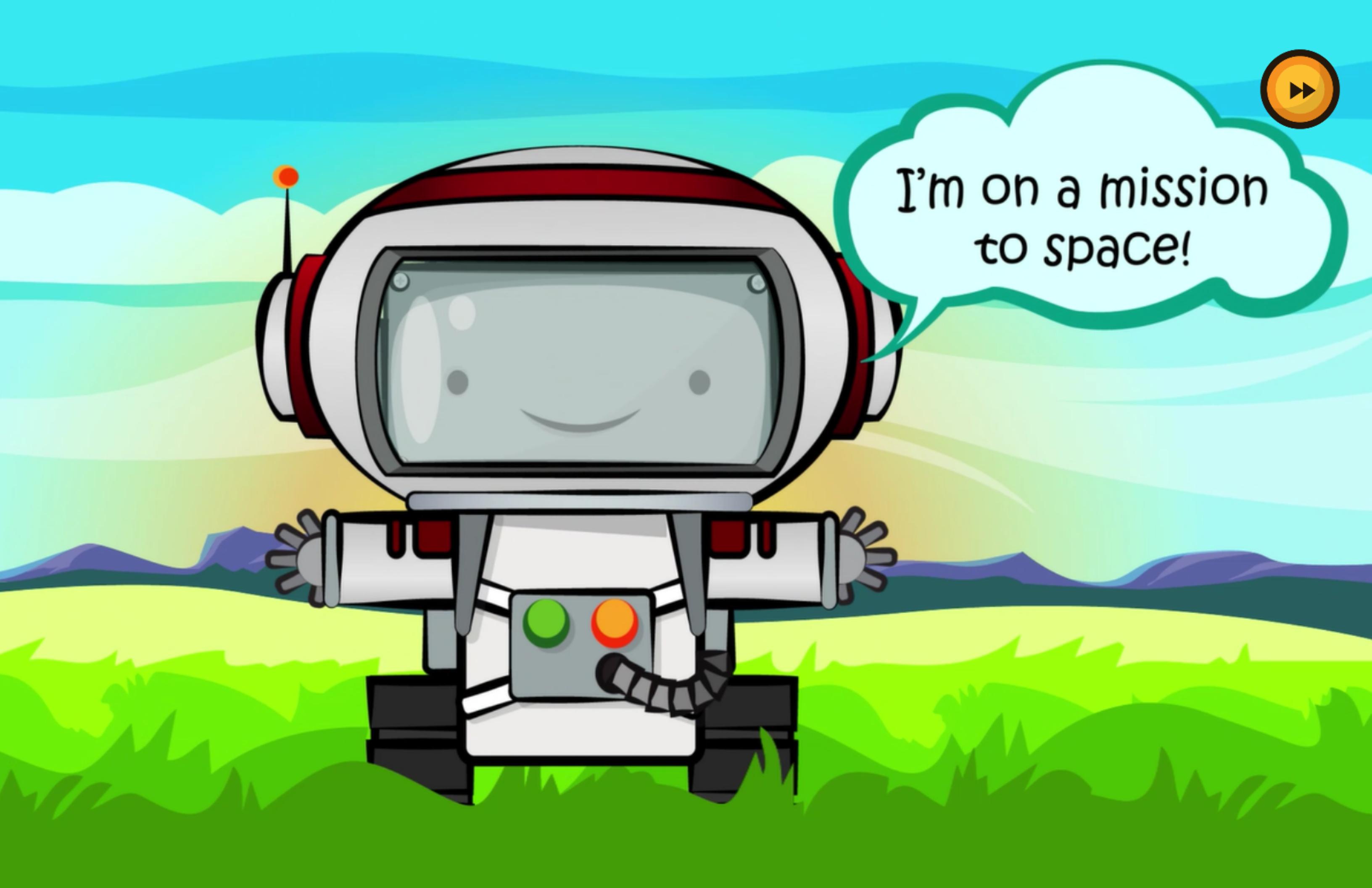


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Front ▾

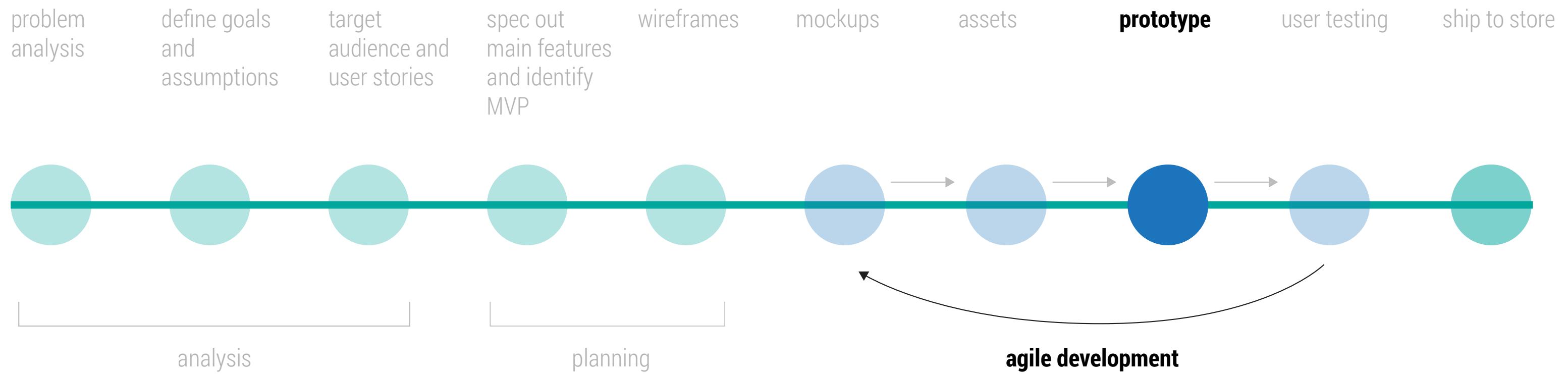


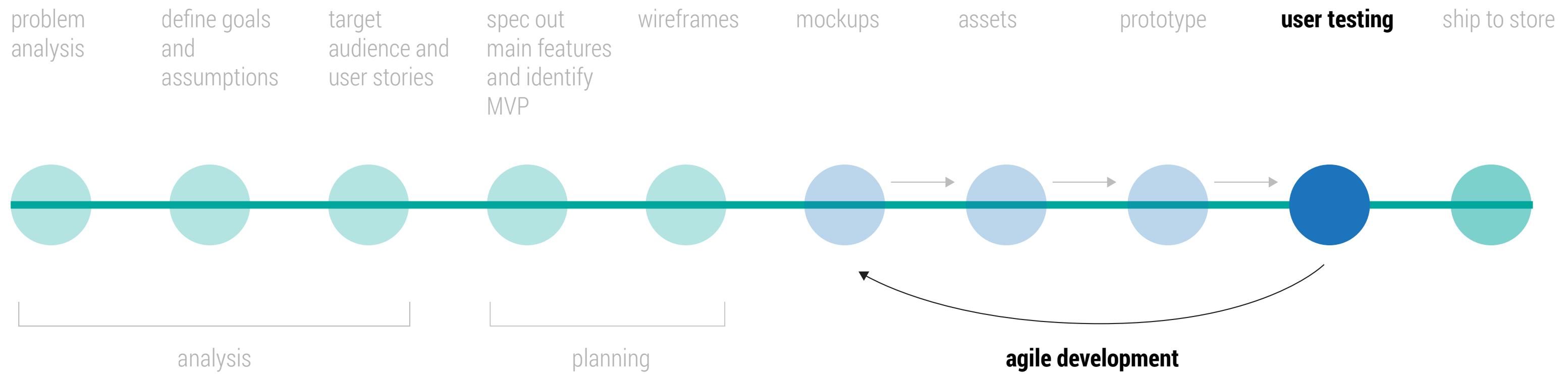


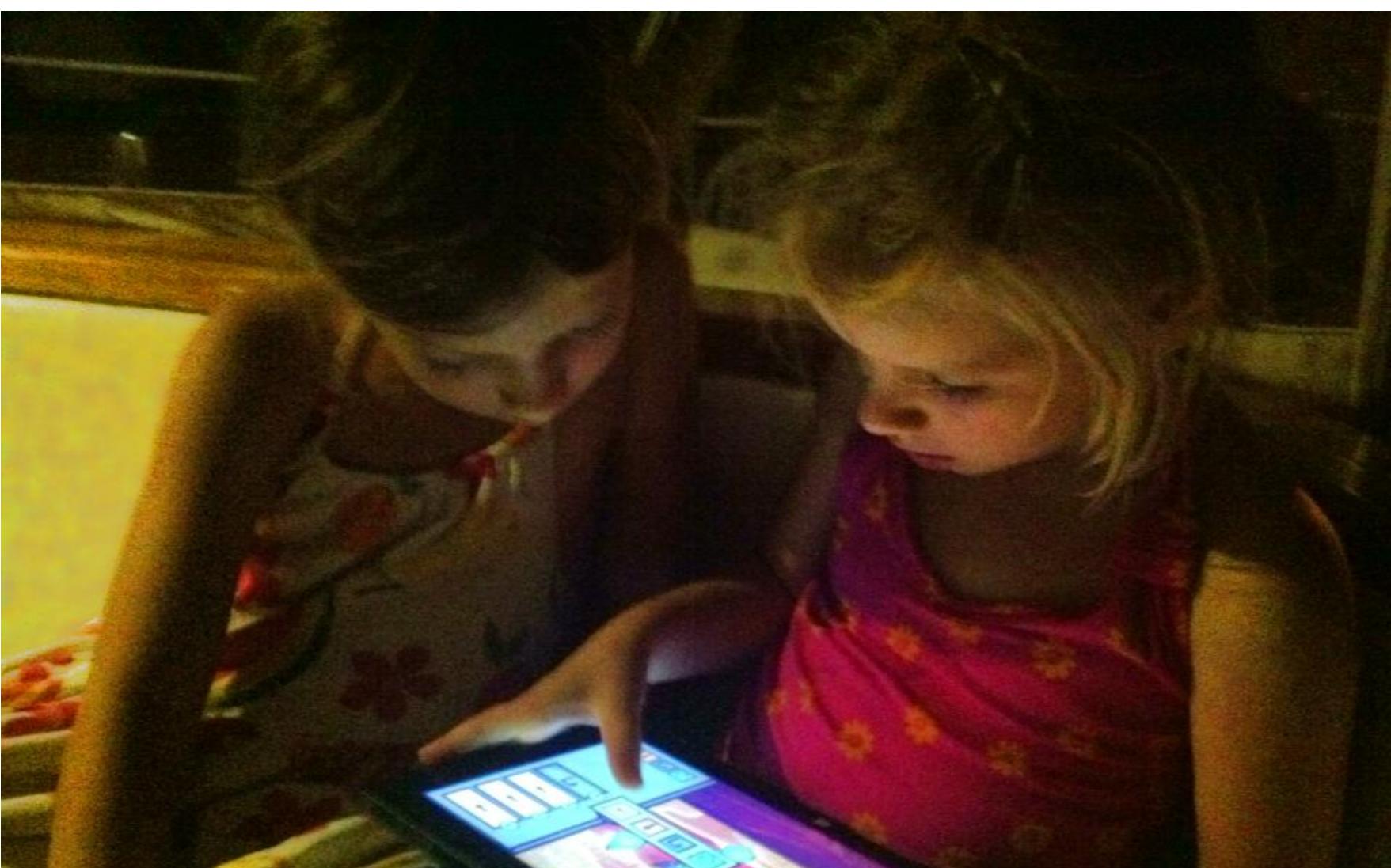
I'm on a mission
to space!

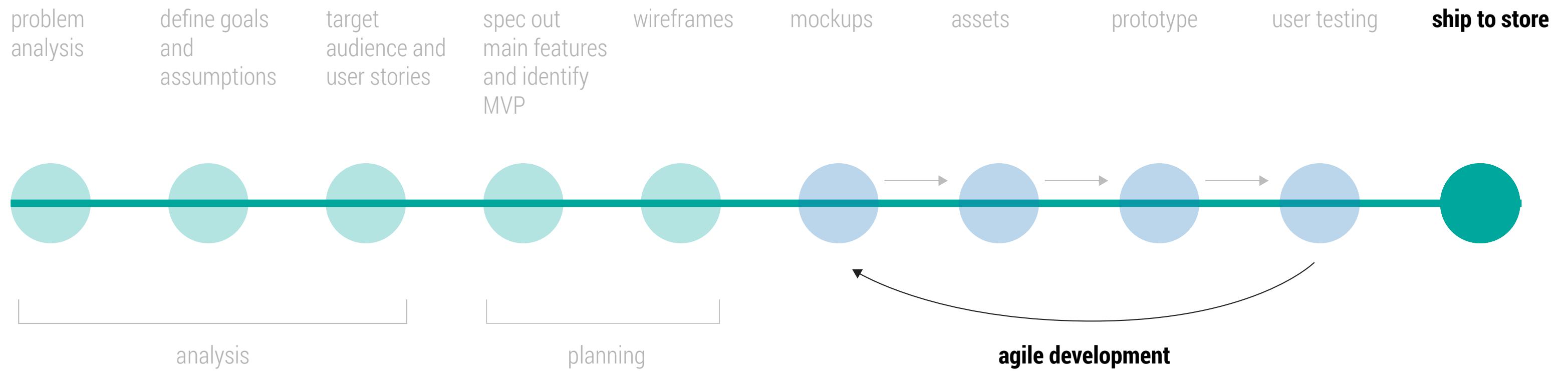












WeeCoder



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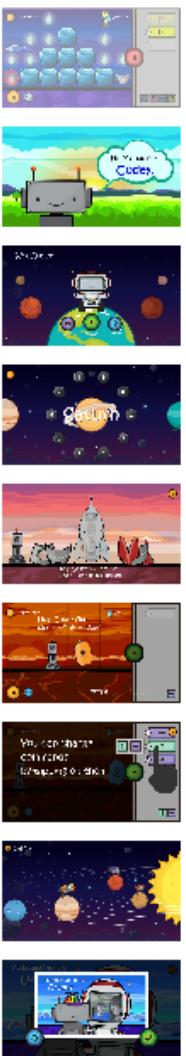
Description

An engaging educational experience targeted for children 3-11. Learn basic programming concepts such as sequential thought, looping and conditionals in a fun and interactive way by joining a little robot (Codey) on his adventures.

Come along with Codey on his mission to se...

Features

- Great educational experience for kids 3+ year
- Program Codey through obstacles on all planets of the solar system
- ...



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Category [Games > Kids](#)

Approximate size 122 MB

Age rating 3+

This app has [permission](#) to use some features of your PC that might affect your privacy.

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