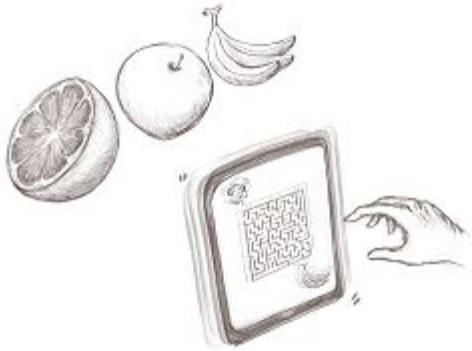


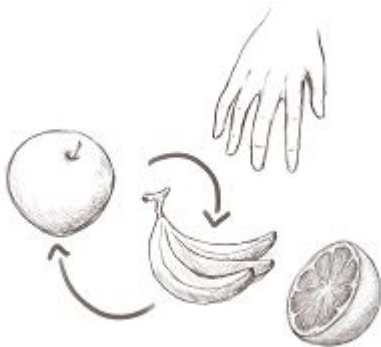
Title: “The adventure on Fruit Island”

Purpose: This game aims to teach the basic concepts of computer programming for blind and visually impaired users by playing the game with tangible objects to build their own programs to solve the puzzles.

How to play:



First, the user can touch the screen and understand the puzzle with vibration and sound



Second, the user can use every day objects as programming commands to solve the puzzle



Third, the user can voice control the program and get an instant feedback

Demo video: <https://www.youtube.com/watch?v=J3lrTKa-OkM&t=66s>

Similar game: <http://www.studio.code.org/hoc/1>

Platform: Phaser

There are 5 pages.

Pages

Intro

Stage

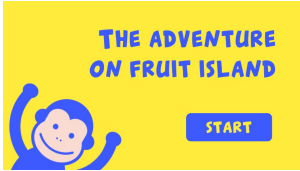
Type in the commands

Result (success or try again)

Congratulations

The description, user interface, user experience, page transition, and the data input/output, scripts for each pages are going to be provided as follows.

These are the notes on resources for the program. First, each page can have the sounds effects. Second, stage page is going to be loaded with the puzzle with which the user can touch and understand the puzzle with vibration and sound. Third, the program would be displayed horizontally.

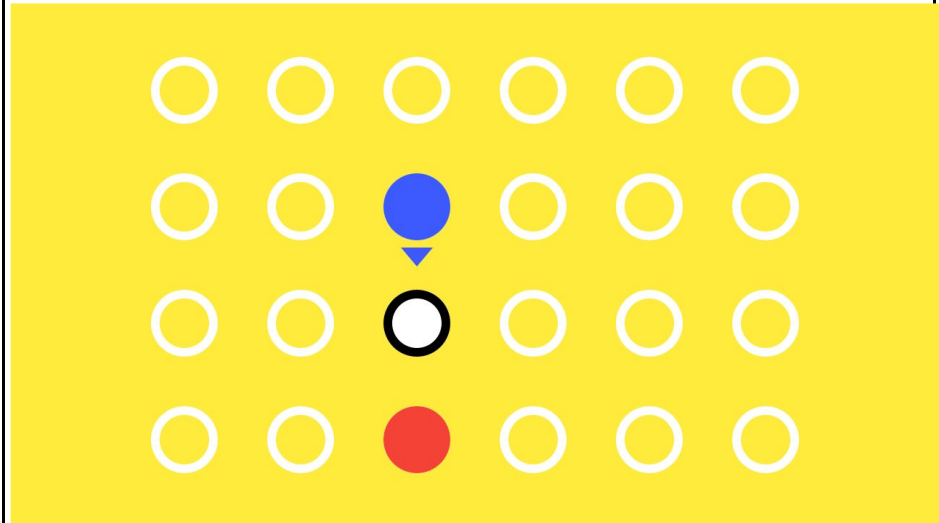
Title	Intro
Description	This is the intro page where the program is going to introduce itself
UI	image (to be provided) 
UX	click 'start'
Page transition	The Intro page moves to the Stage page (note that, initially the page moves to the stage-1)
Data Input/Output	none
Script	

Title	Stage
Description	This is the stage page where the user is going to understand the programming puzzle to solve.

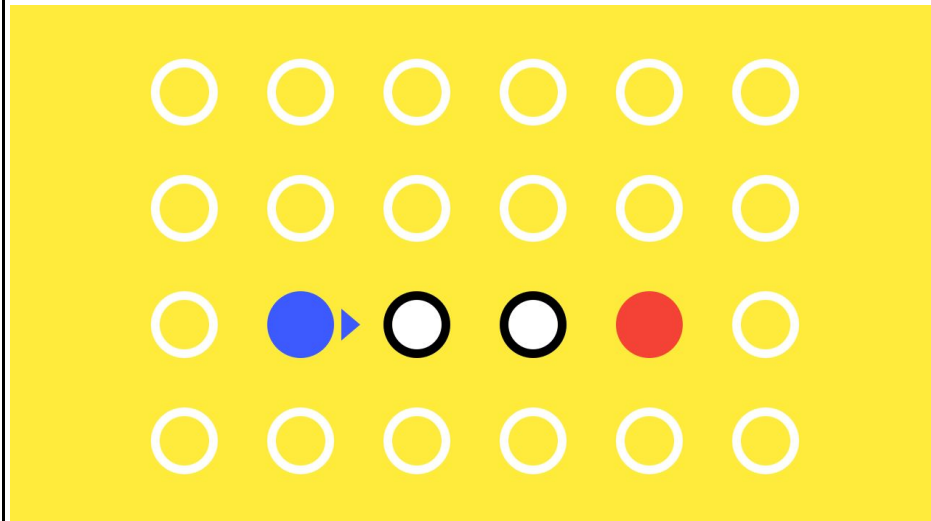
UI

This is the example of the programming puzzle. If it is possible, we would like to play the audio that tells the user about the goal of the game.

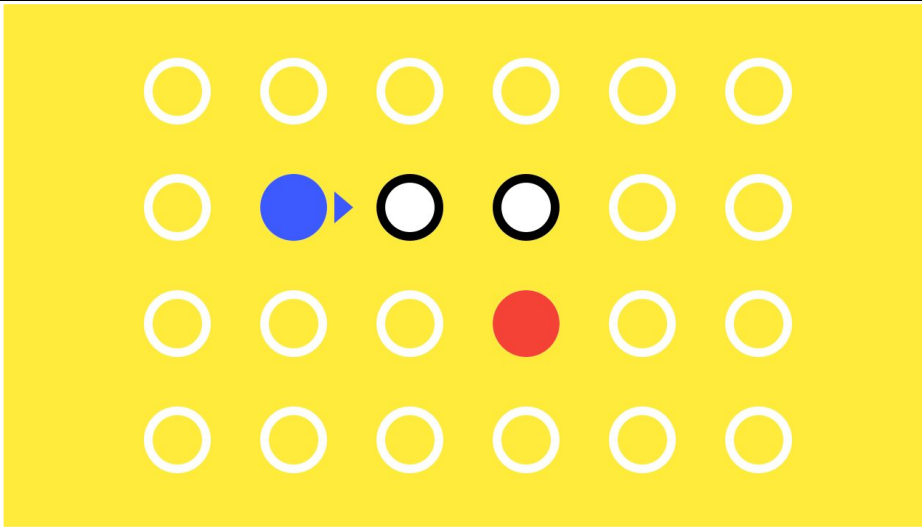
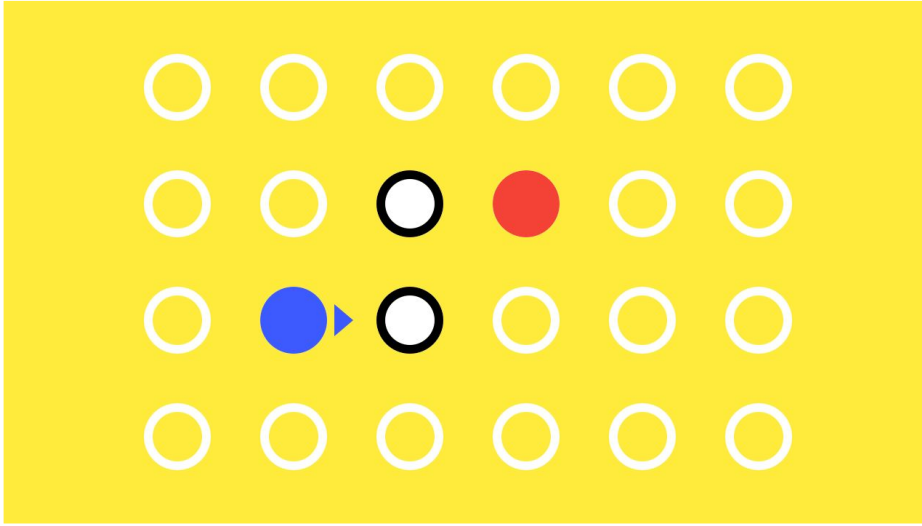
Stage-1



Stage-2



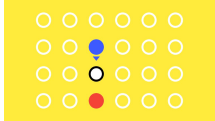
Stage-3

	
	Stage-4
	
UX	click 'right arrow'
Page transition	The stage page moves to the type in the commands page.
Data Input/Output	none
Voice scripts	

*Note that there would be 4 stages in total

Title	Type in the commands
Description	This is the type in the commands page where the user is going to type in the commands
UI	none
UX	click 'right arrow'
Page transition	After the user types in the commands, they can click right arrow to see the result

Data Input/Output	user's command
Scripts	

Title	Result
Description	This is the game page where the user is going to hear <u>how their program runs</u> and gets the feedbacks. Whenever the character makes the movement, it is going to make the sound effects.
UI	game 
UX	click 'right arrow' or 'left arrow'
Page transition	<ol style="list-style-type: none"> 1) When user is successful, the image success is going to appear. The user can click the right arrow to move to the next stage if there is the stage left. If all stages are clear, the result page moves to the congratulations page 2) When user is not successful, the image try again is going to appear. The user can click the left arrow to go back to the state of the game which was not successful. When they click the left arrow, the result page is going to move to the stage page which the user is going to give another try.
Data Input/Output	none
Scripts	none

Title	Congratulations
Description	This is the intro page where the program is going to congratulate the user is they are successful
UI	image and sounds effects
UX	none
Page transition	After the image is fully loaded, the page automatically moves to the intro page
Data Input/Output	none
Script	Congratulations! We solved all the puzzles. I'm very proud of you. See you again!

