Project Title:

INFRASTRUCTURE AND INTEGRATED TOOLS FOR PERSONALIZED LEARNING OF READING SKILL

Project Acronym:



Grant Agreement number:

731724 — iRead H2020-ICT-2016-2017/H2020-ICT-2016-1

Subject:

D6.3

iRead Literacy Games Literacy Games - Batch #2

Dissemination Level:

PUBLIC

Lead Beneficiary:

FISH

Project Coordinator:

UCL

Contributors:

FISH, UCL, NTUA, UGOT

Revision	Preparation date	Period covered	Project start date	Project duration
V1	April 2018	Month 1-16	01/01/2017	48 Months

This project has received funding from the European Union's Horizon 2020 research and innovation programme under the Grant Agreement No 731724



NaviGo – Pyramid of the Lost Words PC Build #Batch 2 Game Delivery – March 2018

D6.3 Literacy Games - Batch#2 - WP6

Installation:

Access the files:

W: http://sandbox.fishinabottle.com/iread/

U: iread P: iR3adhUjjW

Build Contents The user flow / content of the test build is as follows:

- Title Screen Character Customisation Level Select (Placeholder)
- 1. Cleomatchra (Pairs)
- 2. Bridgyptian
- 3. Hearoglyphs
- 4. Raft Rapid Fire
- 5. Pillar Pusher
- 6. Walk Like an Egyptian
- 7. Remove the Runes
- 8. Slicecophagus
- 9. Cogelisk
- 10. Perilous Paths
- 11. Croco-tiles
- 12. Anubrick
- 13. Cartastrophe

As illustrated by the in game map, the 13 puzzles above are laid out in the ruin as a cycle, the puzzles will flow through in the order shown on the map and after finishing the 13th puzzle, return to the 1st.

Game Instructions

Gameplay instructions will be delivered via a series of in game visual prompts and environmental prompts. Points of interest within the environments and required interface interactions will be highlighted to guide players to their next action. These prompts will be subtle to begin with, escalating in urgency if the player continues to be inactive or takes the wrong action.

These prompts will be used consistently throughout the game experience, allowing players to become familiar with the desired actions.

Implementation of these prompts has begun and is partially implemented in the latest deliverable.

Game Narrative

Information on the planned approach to game narrative can be found in iRead_D6.1_Deliverable Final.PDF, 3.1 — Navi-go game concept. Game narrative is planned towards the end of the development cycle. This ensures sufficient time is available for fully implementing the essential pedagogical features and allows the narrative to be crafted with full knowledge of all of the puzzle designs.

Narrative has not yet begun and is not included in the latest deliverable.

Pedagogical Instructions

Pedagogical instructions will be provided at the start of a puzzle, when a new learning outcome is introduced. Implementation of the Pedagogical Instructions has begun but this is not included in the latest deliverable.

A player feedback loop has been partially implemented within the learning puzzles, though work in this area is still ongoing. Incorrect responses from the player will trigger increasing levels of feedback and guidance to help them understand the learning and guide them to the correct response. In the first instance feedback will simply prompt the player to try again. Further incorrect answers will result in hints and ultimately the correct answer being highlighted to the player.

Controls

To navigate the user has two options, they can tap to place a marker and have the player path to it or hold their finger down revealing a joystick to manually navigate the player around the scene.

From any scene the player can tap the top left UI arrow which will pause the action and reveal a "Return to Title Screen" button for navigating back to the map to select a specific puzzle. At the end of many puzzles, a door or path forward will open, to move to the next puzzle navigate your character through the doorways.

Title Screen / Character Customisation / Level Select

Upon load the title screen will appear with a prompt to tap anywhere. Once tapped, the character customisation screen will appear. If you have played the build before, your character will be loaded, if not a random character will be created. Within the character customisation, customisation areas are split by tabs on the left side of the papyrus. Tap the tabs to open them and select your asset choice and in many cases colour choice. Tap the username at the top of the screen to change your character name. In addition, there are two buttons on the bottom right of the papyrus, a randomise button that will create a random character and the save button that will save your choices and proceed to the map screen. From the map screen, select whichever puzzle you would like to start at.

Cleomatchra (Pairs) Teaching Prefixes

To start the puzzle, tap the puzzle plinth in the middle of the room. The player will walk up to it and open the puzzle UI. The player must now match the correct prefixes to the correct word stem by tapping a tile from column A and a tile from column B. Audio and visual feedback has been added to indicate correct and negative answers as well as make it clear which previous pairs were made. There are instances where multiple tiles with the same prefix on can appear due to limited sample domain data, however, the answer is calculated by checking the pairs final word so any variation will still work.

Bridgyptian *Teaching Prefixes Alone*

Entering the room and climbing the stairs will begin the puzzle. The player must drag and drop pillars that contain the correct stem word from the back wall onto the puzzle holder position.

Upon doing so the pillars will disappear into the floor replaced by the next question. Upon 3 correct answers the bridge opens and the player can walk to the next puzzle. **Fun tip:** The player can drop the pillar in the lava – it will respawn.

Hearoglyphs Same Phoneme Different Grapheme Comparison

In Hearoglyphs the player must pair tiles similarly to Cleomatchra, however in this case, column A is comprised of tiles that will play the word audio and the player must match it with the correct word from column B. The player can tap their selected audio button again to hear the word played again if needed. Audio and visual feedback has been added to encourage the player and ensure paired tiles are clear to the user.

Raft Rapid Fire GPC Taught Alone

In Raft Rapid Fire the player must tap the barrels that contain correct words as they float and swing into view. Upon getting 10 correct answers, the game will end. If they tap incorrect answers or fail to tap correct answers the raft will take damage. After taking damage 5 times, the player will fall into the river and the game will restart.

Pillar Pusher Construct Word from Graphemes

In Pillar Pusher the player must walk forwards in the room to begin the puzzle. Once started the player will hear a word they need to recreate. Drag and drop the pillars into the slots to build the word from the graphemes on each pillar. When all slots are filled with pillars, a cutscene will play displaying how well the player has done. If still not correct, rearrange the pillars until the solution is found.

Walk Like an Egyptian Teaching Prefixes Alone

In Walk Like an Egyptian the player must cross the dangerous chasm by jumping from hexagon to hexagon. As the player steps on the starting grid a group of hexagonal pillars will rise from the depths, the player must tap the pillar that contains the correct word which will trigger the character to jump forwards onto it. If incorrect, the pillar will fall down and the player will jump back into place. Continue jumping across the correct pillars until the character reaches the other side safely.

Remove the Runes *Teaching Prefixes Together*

To play remove the runes, tap the plinth to walk up to it and begin the puzzle. To complete the puzzle, tap tiles to activate / deactivate them until only the correct tiles are activated. When the font is glowing blue the tile is active. Once complete, the tiles will spin and repeat the correct words to reinforce learning.

Slicecophagus Placeholder – non-sample domain model data

To play Slicecophagus, tap the plinth to walk up to it and begin the puzzle. The game will begin and the player is presented with 3 or 4 tiles. Drag and drop the tiles along the horizontal slot to position the tiles. The player must position the tiles so that the laser points at the location they wish to slice the word (in this case to break it into syllables). When the tiles are positioned correctly, tap the laser button at the bottom of the puzzle board to enter your solution attempt. The laser will cut apart all words that are placed correctly. Continue until the solution is found.

Cogelisk Sentences

To play Cogelisk, walk up the stairs on the left and onto the platform to begin the puzzle. The game will begin and the player is presented with a sentence with some of the words being presented on large cogs. Swipe the cogs vertically to rotate the cogs and choose words to finish creating the sentence. When the cogs are positioned correctly, the sentence will be read aloud

and the player will be presented with a new sentence. Once the player has solved three sentences, the bridge will appear and the player can exit the area.

Perilous Paths Sentences

To play Perilous Paths, approach the rope bridges to begin the puzzle. The game will begin and the player is presented with a sentence which contains a blank space. Tap the rope bridge that shows the correct word to fill the blank in the sentence. When the correct bridge is selected, the sentence will be read aloud and the player will be able to progress to the next set of rope bridges and the next sentence. Once the player has solved five sentences, they will reach the end of the room and can exit the area.

Anubrick Sentences

In Anubrick the player is presented with a wall displaying a sentence, with each word appearing on its own brick in the wall. The player must tap the correct words to answer the question presented in the UI. In the current build requests the player select the nouns shown in the sentence. Once all of the nouns have been selected, the wall will retract into the floor and the player will be presented with another wall to repeat the process. Once the player has solved three questions, they will be able to reach the end of the room and exit the area.

The second version of Anubrick shows two sentences, with certain words highlighted in the first sentence. The player must then select the words in the second sentence that are of the same type. For example, if the nouns are highlighted in the first sentence then the player must select the nouns in the second sentence.

Cartastrophe Teaching Prefixes Together / Teaching Prefixes Alone

Currently Cartastrophe flips between both prefixes together and prefixes alone however in the final product the puzzle would only be teaching one rule at a time. The player must tap to jump, collecting as many gems as they can until they reach a question section. During question sections the player must drag and drop the missing track piece to the

correct lane, completing the track and allowing the minecart to continue forwards. After they get 6 correct answers the game ends. If they get an incorrect answer, the correct answer is revealed and the minecart moves forward, falling down a gap in the track and is given a new question.