Champion document
Company: ScoSoft | Game: Scoto | Feature: Overlays
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1. Brief introduction

The overlay champion covers elements of *Scoto* that deal with displaying elements at a layer above the actual gameplay itself. Overlays can be divided into the categories of the game's menu system, puzzles, and other minor heads up display elements.

Scoto players will have access to the launch, settings, and pause menu. The launch menu is the first screen players see after starting the game and provides the option to play the game, access the settings menu, or quit the game entirely. The settings menu allows the modification of various game attributes, including the volume level, maximum frames per second, resolution, and full screen status. The pause menu can only be accessed after the launch menu has been used to start gameplay. In the pause menu, gameplay time is stopped so that players can resume at a later time, return to the main menu, or quit the game entirely.

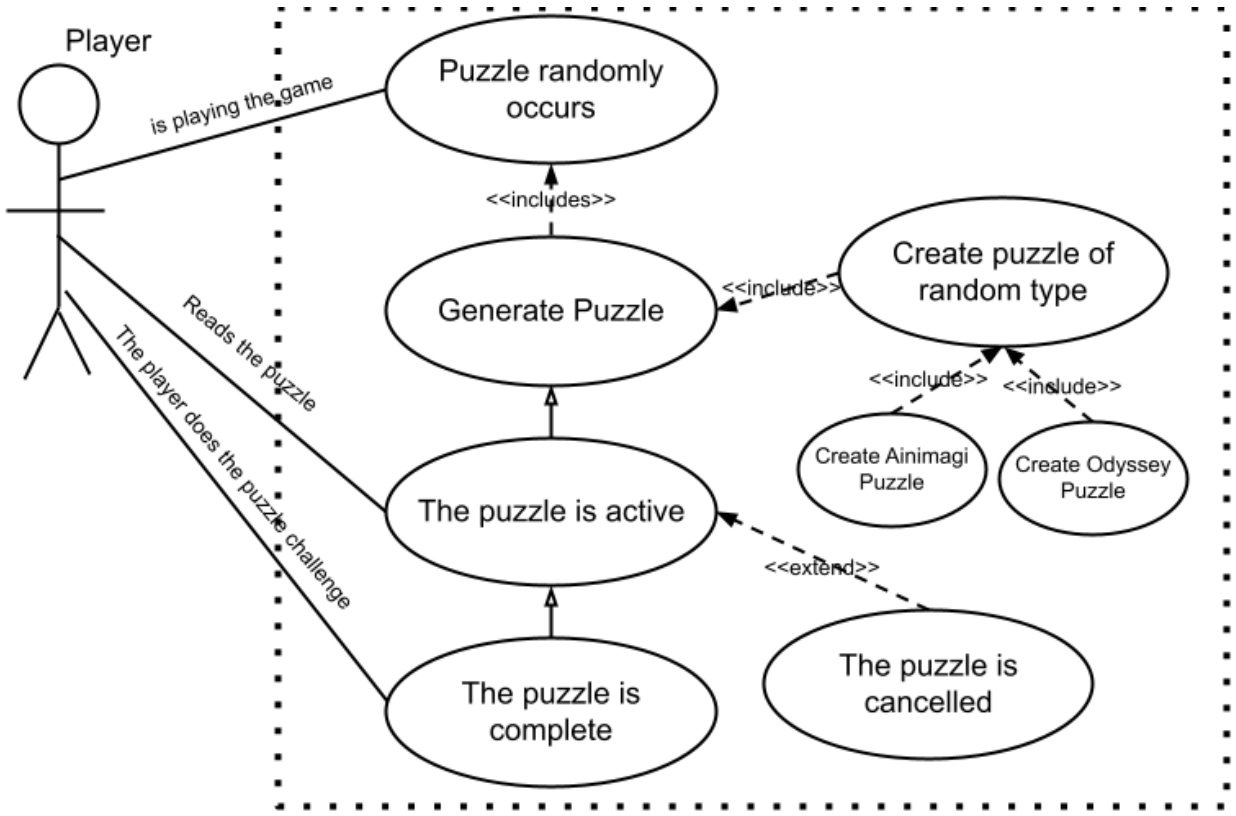
While playing, players will be provided the option to solve a puzzle at randomly spaced intervals. At this time, a popup will prompt the user with information on how to complete the puzzle. Once started, the player will also have the ability to cancel the puzzle. There are two puzzle types: ainigma and odyssey. Ainigma puzzles are riddle-like and require a typed response. Odyssey puzzles require the player to journey to a randomly chosen place on the game map. Various rewards, like increased health, are provided to the player upon puzzle completion.

2. Use case diagram with scenario

Use Case Diagrams

Scenarios

Scenario 1 (first Use Case Diagram):



Name: Puzzle occurs
Summary: The player is challenged to complete a puzzle of two possible types.
Actors: Player
Preconditions: Player is already in game at the gameplay stage.
Basic sequence:

- **Step 1:** Puzzle randomly occurs
- **Step 2:** Generate the puzzle
- **Step 3:** Create puzzle of random type (Ainimagi or Odyssey)
- **Step 4:** The puzzle is active
- **Step 5** The puzzle is complete

Exceptions:

- **Step 4:** The puzzle is cancelled

Post conditions: The player has completed a puzzle or cancelled it.
Priority: 2*
ID: AK01

3. Data Flow diagram(s) from Level 0 to process description for your feature

Data Flow Diagrams

Context Diagram

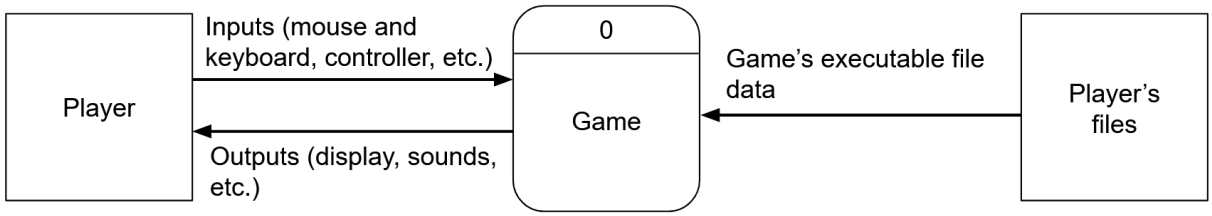


Diagram 0

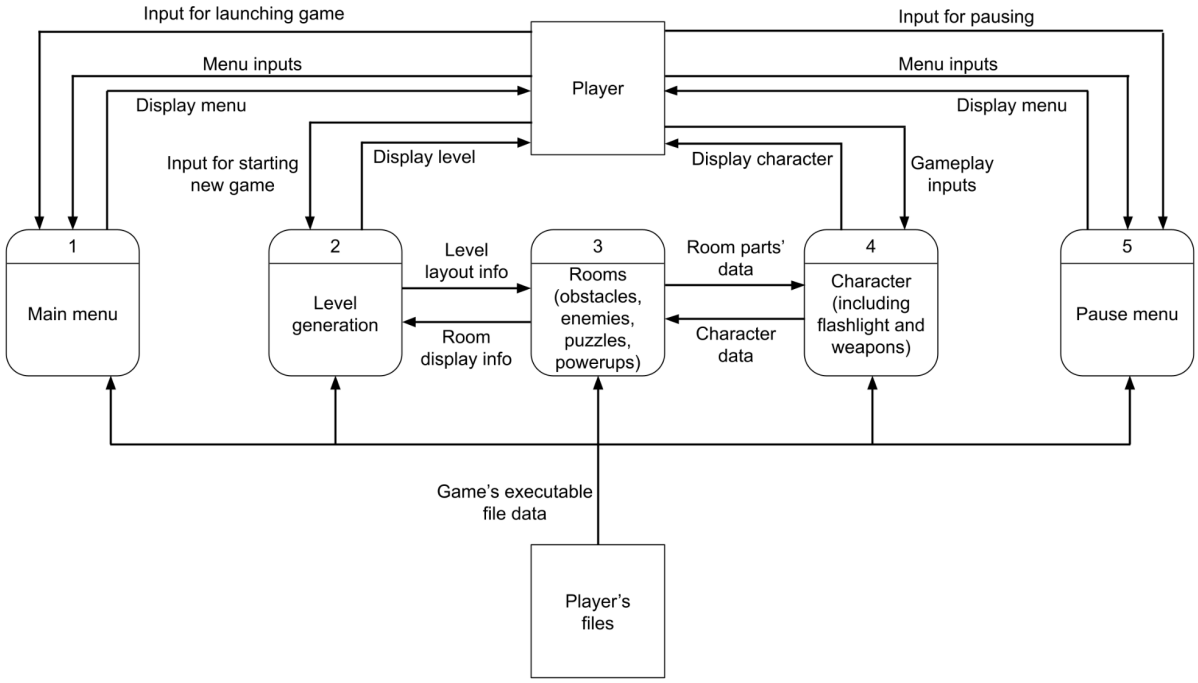
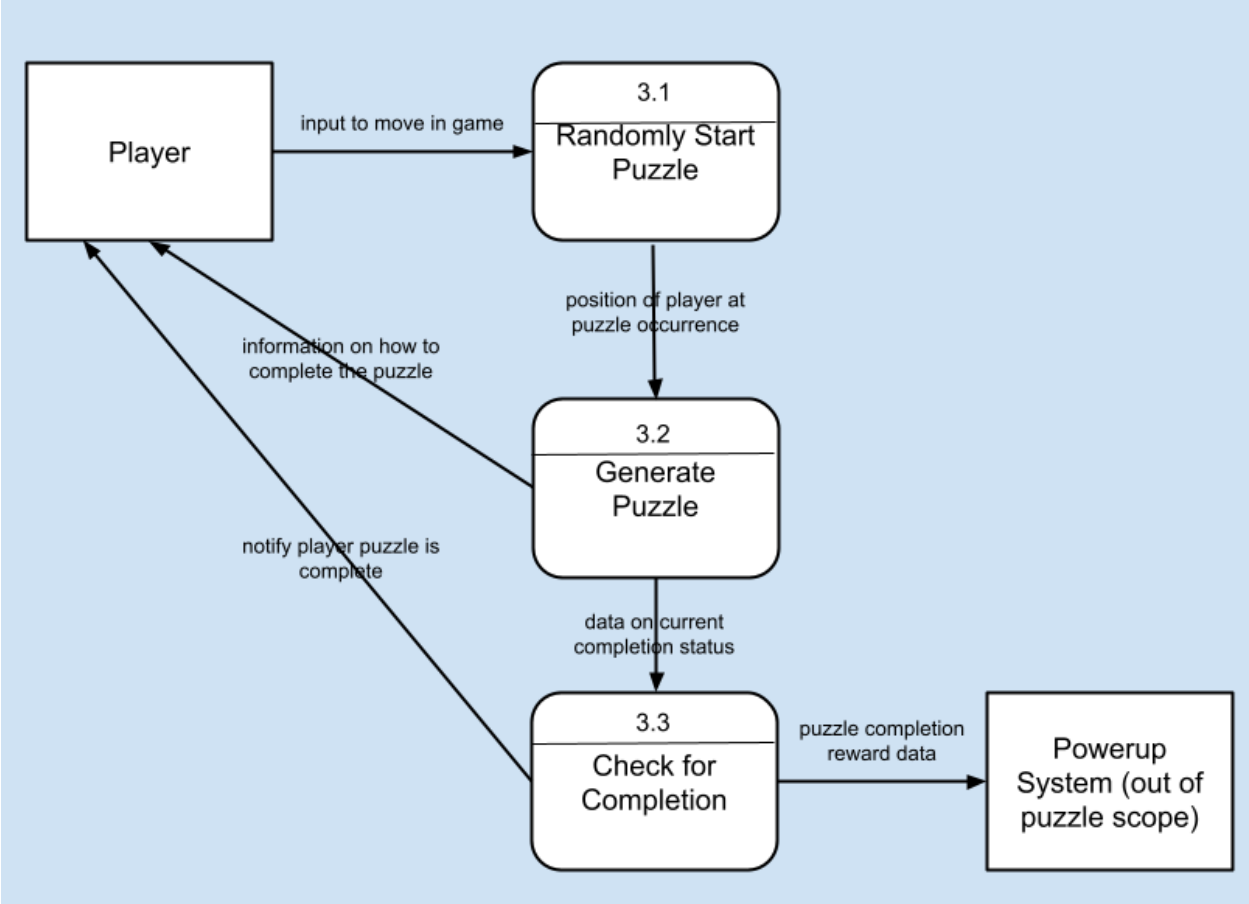


Diagram 3 - Puzzle Occurrence



Process Descriptions

Processes 3.2

Randomly choose puzzle type
IF ainigma puzzle type
    Generate new riddle message and correct answer
    Send the riddle message and instructions to the user
ELSE IF odyssey puzzle type
    Generate random coordinates for player to navigate to
    Send the coordinates and instructions to the user
ENDIF

4. Acceptance Tests

Generate Puzzle

There should exist a test case to ensure the random coordinates generated as part of the odyssey puzzle can be navigated to by the player.

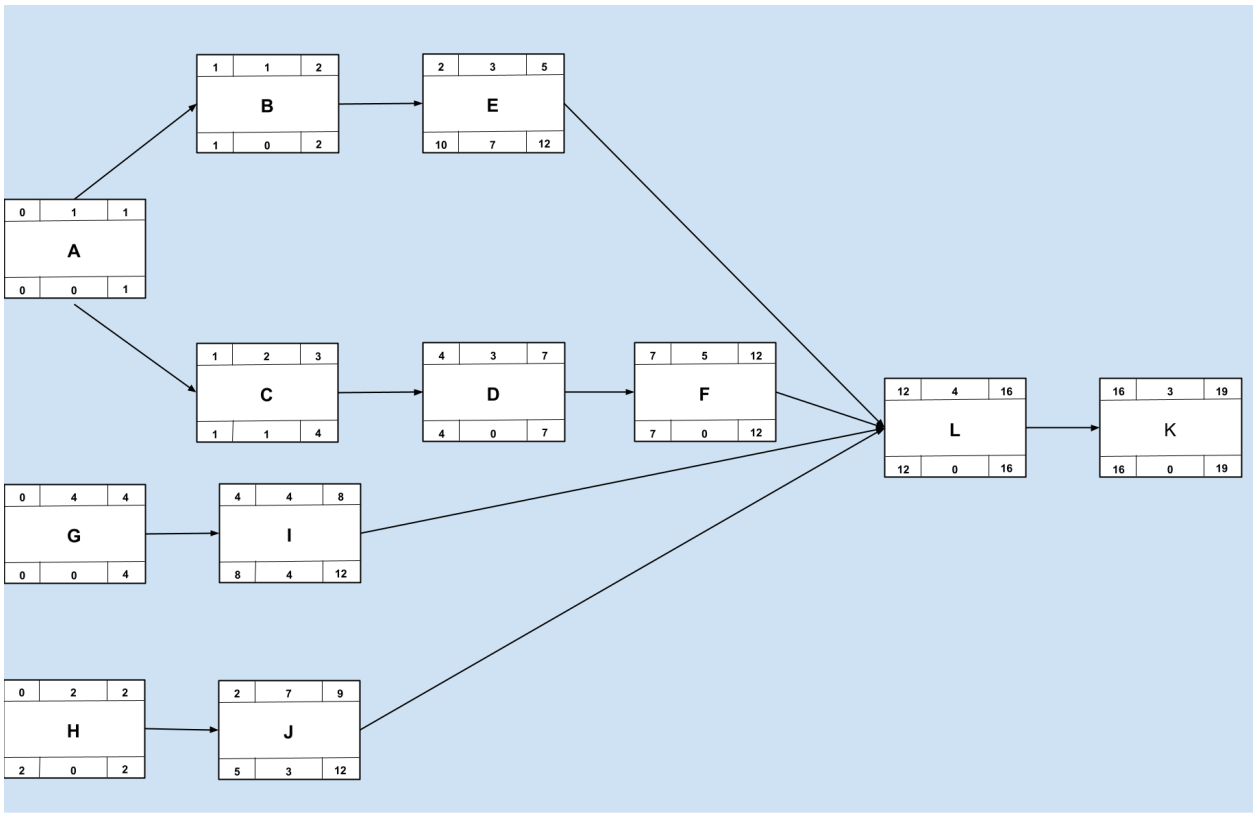
Check for Completion
There should exist a test case to ensure the user can answer an ainigma puzzle in a case insensitive manner. There should also exist a test case for the odyssey puzzle to ensure the player always triggers puzzle completion when within the specified radius of the goal coordinates.

5. Timeline

Work items

Task	Description	Predicted Duration	Predecessor task(s)
A	Launch menu graphic design	1	-
B	Pause menu graphic design	1	A
C	Settings menu graphic design	2	A
D	Launch menu programming	3	A, C
E	Pause menu programming	3	A, B
F	Settings menu programming	5	A, D
G	Ainigma puzzle graphic design	4	-
H	Odyssey puzzle graphic design	2	-
I	Ainigma puzzle programming	4	G
J	Odyssey puzzle programming	7	H
K	Documentation	3	L
L	Testing	4	D, E, F, I, J

Pert diagram



Gantt timeline

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
A	Launch menu graphic design																			
B	Pause menu graphic design		A																	
C	Settings menu graphic design		A																	
D	Launch menu programming					A, C														
E	Pause menu programming			A, B																
F	Settings menu programming								A, D											
G	Ainigma puzzle graphic design																			
H	Odyssey puzzle graphic design																			
I	Ainigma puzzle programming					G														
J	Odyssey puzzle programming			H																
K	Documentation																	L		
L	Testing													D, E, F, I, J, G, H						
		KEY			planned hours															
					slack time															