*Florida International University*

*School of Computing and Information Sciences*

Software Engineering Focus

Feature Document

User Story ID #735 Create Second Level Model

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**Project:** AR-VR-VE for Computer Science

**Product Owner(s)**: Francisco Ortega

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**Instructor**: Masoud Sadjadi

**User Story Name: Add a Main Menu**

* Description: As a user, I would like to have a second level so that I may play more

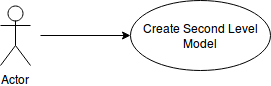
Acceptance Criteria

* Level builds upon concepts established in first level to provide a more complex problem to solve.
* Includes multiple modules.
* Requires user to create module transitions.
* Goal should be the same as prior level (press button with robot), but path required to reach that goal differs.

**Use Case**

* Name: Create Second Level Model
* Actor: Player
* Preconditions: Level one completed.
* Description:
  + User must navigate room and pick up modules.
  + System shows modules being held.
  + User places modules on robot board.
  + System lets modules rest on board.
  + User draws transitions from one module to the next in the order they should execute.
  + System displays visual representation of this transition using a tube from one module to the next.
  + User runs robot.
  + System has robot move according to modules.
  + Robot runs into button.
  + Level complete.

**Use Case Diagram**



**Sequence Diagram**

**Class Diagram**

**Unit Test**

* Test case ID: 005
* Description/Summary of Test: Complete the first level.
* Pre-condition: First Level is completed
* Expected Results: The second level will load
* Actual Result: The second level loaded
* Status (Fail/Pass): Pass
* Test case ID: 006
* Description/Summary of Test: User presses up on vive trackpad while inside a forward module on the robot board and releases while on the right module.
* Pre-condition: Second level loaded
* Expected Results: A cylinder will be drawn between the modules.
* Actual Result: Cylinder is drawn between the modules
* Status (Fail/Pass): Pass
* Test case ID: 007
* Description/Summary of Test: User runs robot after a transition between forward and left modules is drawn.
* Pre-condition: User draws transition between two modules
* Expected Results: Both modules will execute and will cause the robot to touch the button in the level.
* Actual Result: Both modules executed and caused the robot to touch the button.
* Status (Fail/Pass): Pass
* Test case ID: 008
* Description/Summary of Test: Robot touches button in level.
* Pre-condition: User has run the robot using the left and forward modules.
* Expected Results:Level ends and victory screen appears for level.
* Actual Result:Level ends and victory screen appears for level.
* Status (Fail/Pass): Pass

**Visual User Guide**