*Florida International University*

*School of Computing and Information Sciences*

Software Engineering Focus

Feature Document

User Story ID #673 Logical XOR Gate in AR

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**Project:** AR-VR-VE for Computer Science 1.0

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

**Mentor(s)**: Francisco Ortega

**Instructor**: Masoud Sadjadi

**User Story Name: Logical XOR Gate in AR**

* Description: As a user I would like to view the logical XOR gate in AR, so that I can see its output value based on different binary input values.

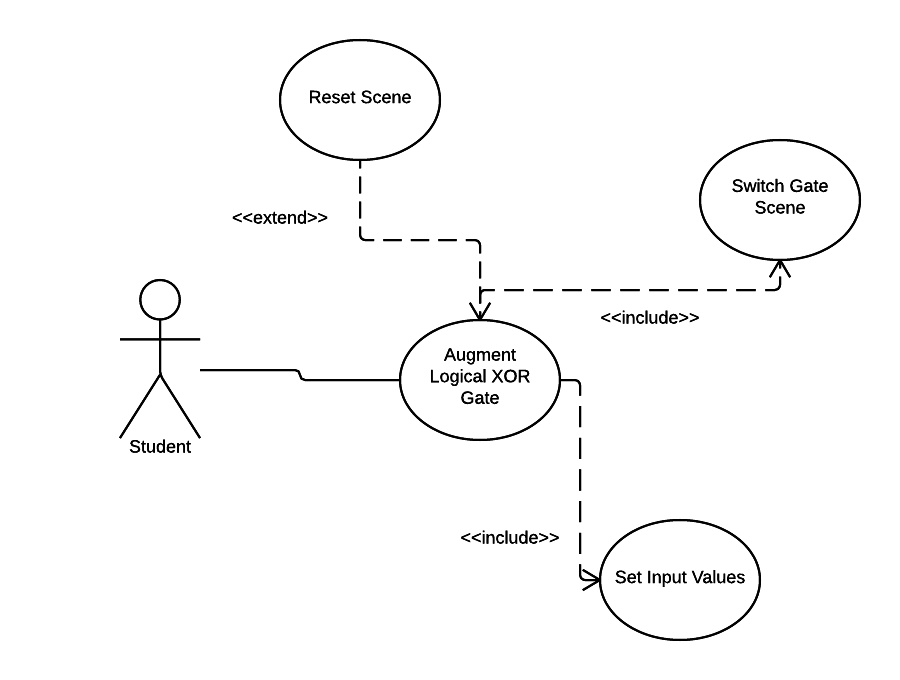
Acceptance Criteria

* The user can change the inputs to 00, 01, 10, 11
* The model notifies the user of when the output changes.

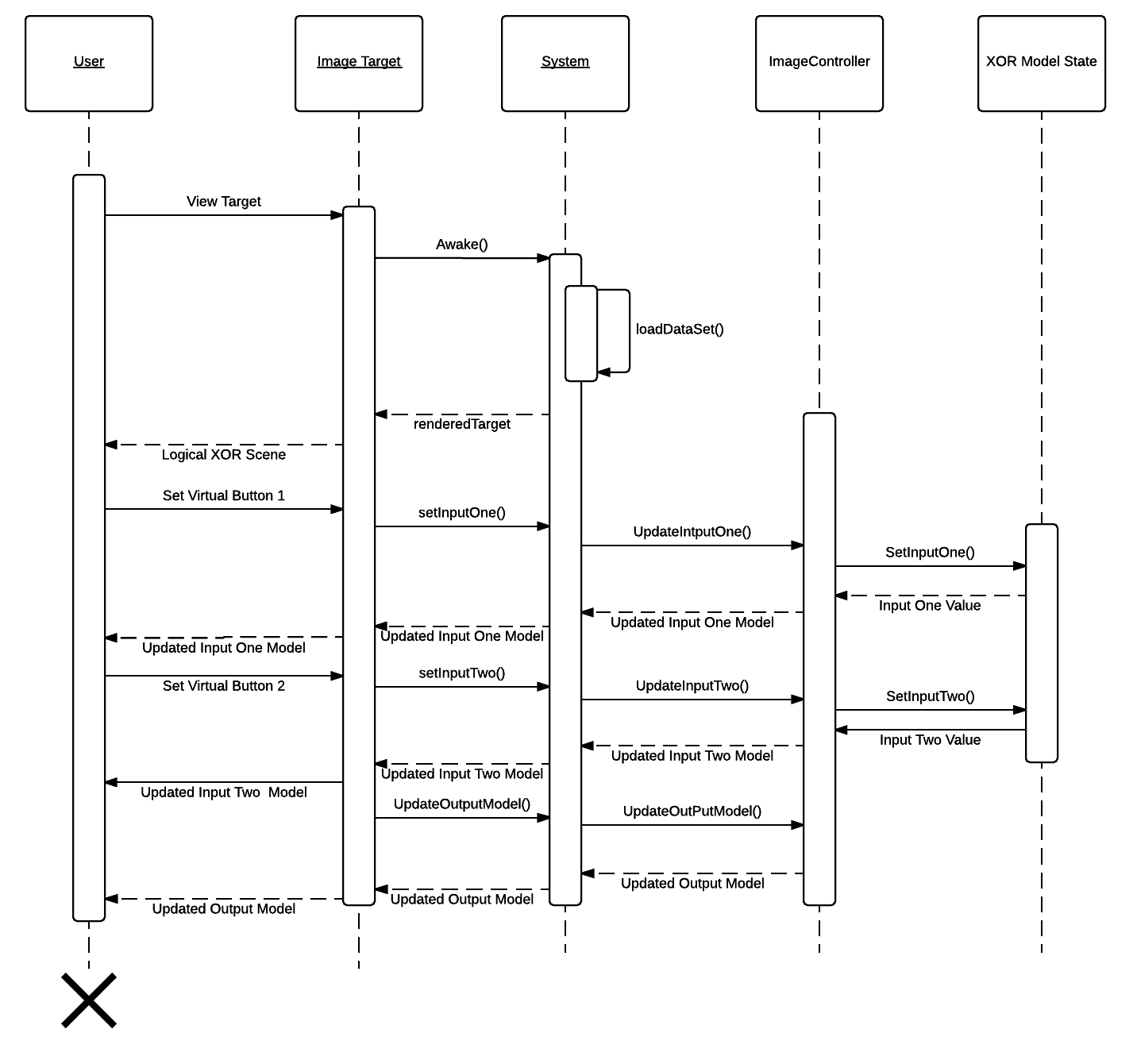
**Use Case**

* Name: Augment Logical XOR Gate in AR
* Actor: Student
* Preconditions: The student is aiming device camera towards image target.
* Description:
  + - System displays logical xor model.
    - System displays data reference plane.
  + User touches virtual button 1 to set input 1 value.
    - System updates output value.
  + User touches virtual button 2 to set input 2 value.
    - System updates output value.

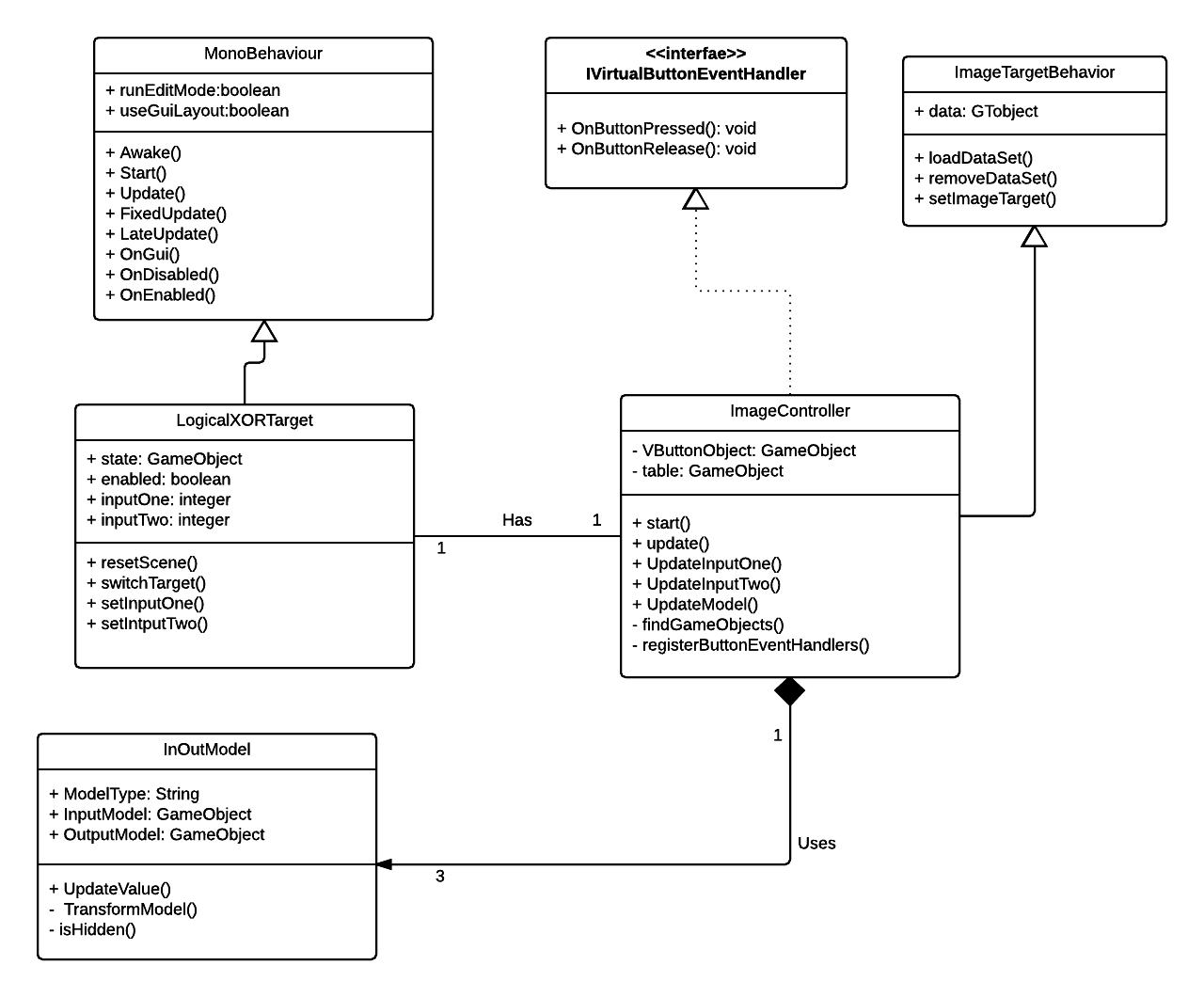
**Use Case Diagram**

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**Sequence Diagram**



**Class Diagram**



**Unit Test**

|  |  |
| --- | --- |
| Test Case ID | LOG-013 |
| Description/Summary of Test: | Verify that UpdateInputTwo() changes the model and value of the input model. |
| Pre-condition: | InputTwo model is the binary value model of zero. The user touched the virtual button for input two. |
| Expected Results: | The LogicalXOrTarget inputTwo field is set to 1. |
| Actual Result: | UpdateInputTwo() returns the LogicalXORTarget inputTwo: 1. |
| Status(Fail/Pass) | Pass |

**Visual User Guide**

