

## **COMP3111: Introduction to Software Engineering**

### **Minutes of the 1<sup>st</sup> Project Meeting**

**Date:** 2023/10/06 (Friday)

**Time:** 16:00

**Venue:** Group Study Rooms/ LG1-327

**Attending:** Law Hui Nok (Tim) , Lam Hoi Yi (Kelly) , Lo Wing Yan (Kelly)

**Absent:** N/A

**Recorder:** Lo Wing Yan (Kelly)

#### **1. Discussion of building Data Modeling**

- 1.1. We clarify and unify the understanding on Game rule of “Tom and Jerry in Maze Game” and the related Class Diagram (Details please refer to Appendix).
- 1.2. We do not have a clear understanding about some of the details of Class Diagram and Use Case Specification. We will make an appointment with the TA in the coming week to address the confusion.

#### **2. Goals for the coming week**

<b>Name</b>	<b>Tasks that will be worked on in the coming week</b>
Law Hui Nok	Complete the Class Diagram and Use Case specification for Function B
Lam Hoi Yi	Complete the Class Diagram and Use Case specification for Function C
Lo Wing Yan	Complete the Class Diagram and Use Case specification for Function A

#### **3. Meeting adjournment and next meeting**

The meeting was adjourned at 19:00. The next meeting is not scheduled.

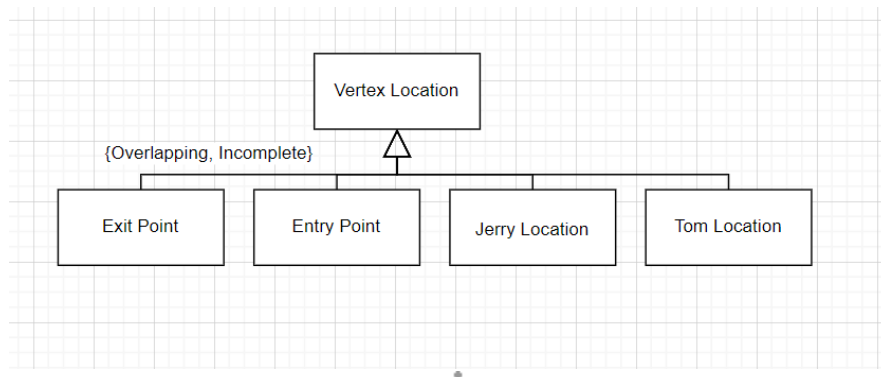
### Appendix 1 [Game Rule]

#### Game Rule:

<u>Player Perspective:</u>	[Mouse: Jerry]
Wins if reach the Exit; loses if being caught by Computer before reaching the Exit	
<u>Computer Perspective:</u>	[Cat: Tom]
Always calculating the SHORTEST PATH between Tom and Jerry so as to catch Player	

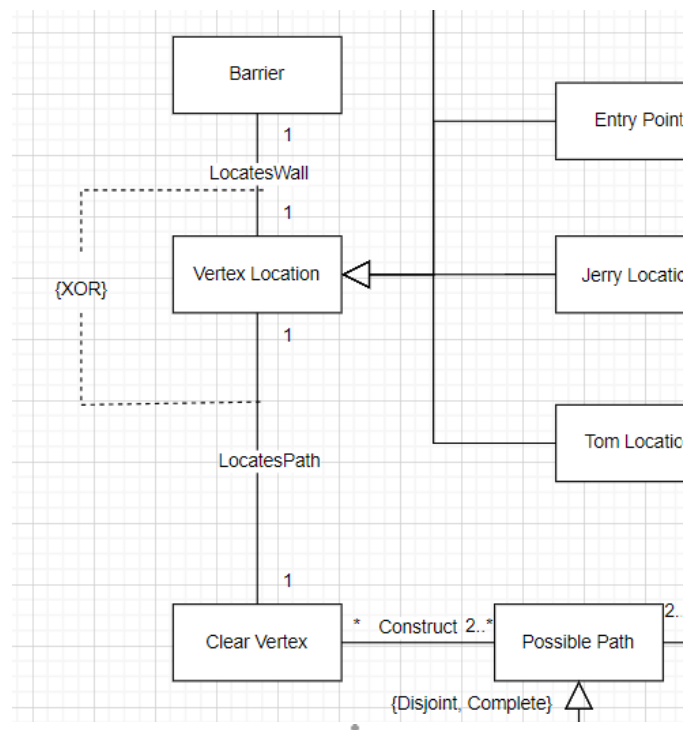
## Appendix 2 [Class Diagram]

## Class Diagram:



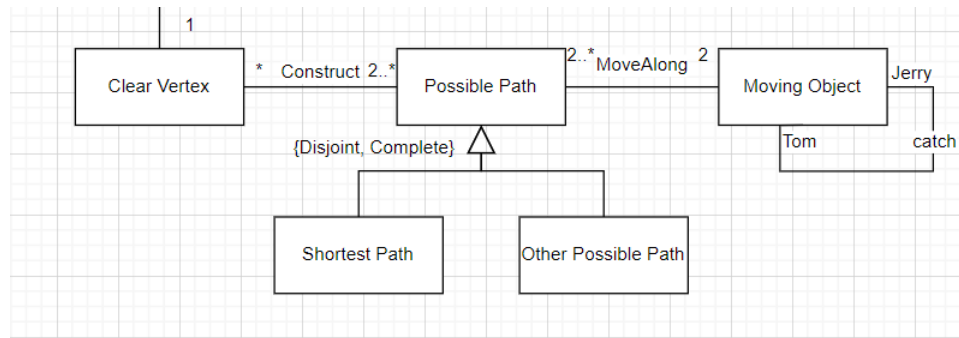
<div>[Generalization]</div> <div>&lt;Vertex Location&gt; &lt;Exit Point&gt; &lt;Entry Point&gt; &lt;Tom Location&gt; &lt;Jerry Location&gt;</div>	<div>&lt;Vertex Location&gt; = [Row, Column]:     &lt;Exit Point&gt;, &lt;Entry Point&gt;, &lt;Tom Location&gt;, &lt;Jerry Location&gt;</div> <div>? <u>Why not part of</u><ul style="list-style-type: none"><li>- &lt;Vertex Location&gt; = &lt;Exit Point&gt;    &lt;Vertex Location&gt; = &lt;Tom Location&gt;     etc.</li><li>- But <i>NOT</i> &lt;Vertex Location&gt; (<i>MUST BE</i>) the <i>CONTAINER</i> of those Location</li></ul></div>													
<div>{overlapping}</div>	<div>Overlapping = representing different status/progress of the game</div> <div><u>Overlap sample cases</u></div> <table><tr><td>&lt;Tom Location&gt; + &lt;Exit Point&gt; &lt;Jerry Location&gt; + &lt;Entry Point&gt;</td><td></td><td>Game <i>START</i> status</td></tr><tr><td>&lt;Jerry Location&gt; + &lt;Exit Point&gt;</td><td>Player <i>WIN</i> the game</td><td rowspan="2">Game <i>END</i> status</td></tr><tr><td>&lt;Tom Location&gt; + &lt;Jerry Location&gt;</td><td>Player <i>LOSE</i> the game I.e. Tom catches Jerry</td></tr><tr><td>&lt;Exit Point&gt; + &lt;Entry Point&gt;</td><td></td><td>Game <i>START</i>     = Game <i>END</i> <i>p.s. player can customize the maze = possible</i></td></tr></table>			<Tom Location> + <Exit Point> <Jerry Location> + <Entry Point>		Game <i>START</i> status	<Jerry Location> + <Exit Point>	Player <i>WIN</i> the game	Game <i>END</i> status	<Tom Location> + <Jerry Location>	Player <i>LOSE</i> the game I.e. Tom catches Jerry	<Exit Point> + <Entry Point>		Game <i>START</i> = Game <i>END</i> <i>p.s. player can customize the maze = possible</i>
<Tom Location> + <Exit Point> <Jerry Location> + <Entry Point>		Game <i>START</i> status												
<Jerry Location> + <Exit Point>	Player <i>WIN</i> the game	Game <i>END</i> status												
<Tom Location> + <Jerry Location>	Player <i>LOSE</i> the game I.e. Tom catches Jerry													
<Exit Point> + <Entry Point>		Game <i>START</i> = Game <i>END</i> <i>p.s. player can customize the maze = possible</i>												
<div>{incomplete}</div>	<div>There are other vertex locations for the path or barrier</div>													

## Meeting Minutes #1



<p>[Association]</p> <p>&lt;Vertex Location&gt; &lt;Clear Vertex&gt; &lt;Barrier&gt; &lt;Possible Path&gt;</p>	<p><u>Relationship between Classes</u></p> <p>“The &lt;Possible Path&gt; (line) is <i>CONSTRUCTED</i> by &lt;Clear Vertex&gt; (white box) which is <i>LOCATED</i> by the &lt;Vertex Location&gt;(address)”</p> <p>Or</p> <p>“The &lt;Barrier&gt; (grey box) which is <i>LOCATED</i> by the &lt;Vertex Location&gt;(address)”</p>
<p>{XOR}</p>	<p>&lt;Vertex Location&gt; can <u>either</u> <i>LOCATE</i> &lt;Barrier&gt; <u>or</u> &lt;Clear Vertex&gt;</p>
<p>[multiplicity]</p> <p>&lt;Vertex Location&gt; &lt;Clear Vertex&gt; &lt;Barrier&gt;</p>	<p><u>1</u> &lt;Vertex Location&gt; can either locate <u>1*</u> &lt;Clear Vertex&gt; or <u>1*</u> &lt;Barrier&gt; (*marked XOR)</p> <p>Or</p> <p><u>1</u> &lt;Barrier&gt; can only have <u>1</u> &lt;Vertex Location&gt; <u>1</u> &lt;Clear Vertex&gt; can only have <u>1</u> &lt;Vertex Location&gt;</p>

## Meeting Minutes #1



[multiplicity]	(Requirement)
<Clear Vertex>	(There must be at least <u>2</u> <Possible Path>) with constructed by <u>*</u> <Clear Vertex>
<Possible Path>	Or
<Moving Object>	( <u>2</u> <Moving Object> move along <u>2</u> or <u>*</u> <Possible Path>)

### ? Relationship between <Moving Object> and <Vertex Location>

Assumption: <Moving Object> moving along the <Possible Path> = they are part of the Path

e.g. Tom/Jerry = the 2 ends of the path

- <Possible Path> is constructed by <Clear Vertex> which location is marked by <Location Vertex>
- = <Moving Object> location is marked by <Location Vertex>