

## FIT2099 Assignment 1

Lab 13 – Team 33:

1. Ong Di Sheng (31109667)
2. Mark Gabriel Sta. Ana Manlangit (29350387)
3. Kennedy Tan Sing Ye (31108121)

### **Work Breakdown Agreement**

We thus agree to work on FIT2099 Assignment 1 as outlined below.

No	Task	Assigned	Reviewer	Deadline
<b>1</b>	<b>Class Diagram</b>			
1.1	<p>REQ 1</p> <ul style="list-style-type: none"><li>- Create subclasses representing the different stages of a Tree</li><li>- Create GrowCapable and SpawnCapable interfaces that will implement grow and spawn abilities in the Tree's subclasses</li></ul> <p>REQ 2</p> <ul style="list-style-type: none"><li>- Create a JumpAction class to handle jumping to high ground</li><li>- Create a HighGroundType enumeration that represents the relevant high ground's type</li><li>- Create a JumpableGround interface for grounds that are able to be jumped</li><li>- Create a HighGroundManager class that keeps track of all the high grounds on the map</li></ul>	Mark Manlangit	Kennedy & Di Sheng	6/4/2022
1.2	<p>REQ 3</p> <ul style="list-style-type: none"><li>- Extend Enemy Class to Goomba and Koopa</li></ul> <p>REQ 4</p> <ul style="list-style-type: none"><li>- Create ConsumeAction class, Destructible interface and extend Items to Power Star and SuperMushroom</li></ul>	Kennedy Tan	Mark Manlangit & Di Sheng	6/4/2022
1.3	<p>REQ 5</p> <ul style="list-style-type: none"><li>- Create a Tradable interface for items that are tradable to enable the trading process involved in TradeAction to be carried out efficiently</li><li>- Create PickupCoinAction class to pick up coin item and add the value of the coin to</li></ul>	Ong Di Sheng	Kennedy & Mark Manlangit	6/4/2022

	<p>the balance in the Wallet</p> <p>REQ6</p> <ul style="list-style-type: none"> <li>Create a SpeakAction class to handle the monologue between the Speakable Toad and the Player</li> </ul>			
1.4	<p>REQ 7</p> <ul style="list-style-type: none"> <li>Create a ResetAction to handle to reset process by ensuring Resettable interface is implemented by everything that is resettable</li> </ul>	Ong Di Sheng	Kennedy & Mark Manlangit	6/4/2022
<b>2</b>	<b>Sequence Diagram</b>			
2.1	<p>JumpAction</p> <ul style="list-style-type: none"> <li>If jump is successful, move the actor to the current high ground location and print a success message, otherwise deal damage to actor from the fall and display an unsuccessful message</li> </ul>	Mark Manlangit	Kennedy & Di Sheng	9/4/2022
2.3	<p>TradeAction</p> <ul style="list-style-type: none"> <li>If transaction is successful, subtract balance from the Wallet and add item to the Player inventory according to the character entered by the user, otherwise error message will be shown</li> </ul>	Ong Di Sheng	Kennedy & Mark Manlangit	9/4/2022
<b>3</b>	<b>Design Rationale</b>			
3.1	<p>REQ 1&amp;2</p> <ul style="list-style-type: none"> <li>Explain usage of classes/interfaces involved in the growth and spawning of the different stages of a Tree, as well as Jumping to high ground using SOLID principles</li> </ul>	Mark Manlangit	Kennedy & Di Sheng	9/4/2022
3.2	<p>REQ 3&amp;4</p> <ul style="list-style-type: none"> <li>Explain usage of classes/interfaces involved in Enemies and Magical Items based on Solid Principles</li> </ul>	Kennedy Tan	Di Sheng & Mark Manlangit	9/4/2022
3.3	<p>REQ 5,6&amp;7</p> <ul style="list-style-type: none"> <li>Explain the usage of classes/interfaces involved in Trading, Monologue and Reset process using SOLID principles</li> </ul>	Ong Di Sheng	Kennedy & Mark Manlangit	9/4/2022

Signed by (type "I accept this WBA")

I, Ong Di Sheng accept this WBA

I, Mark Gabriel Sta. Ana Manlangit accept this WBA

I, Kennedy Tan Sing Ye accept this WBA