# AC22004 - Object Oriented Analysis and Design – Assignment Feedback

**Requirements and Use Cases Assignment 1**

**GROUP 9: Velian, Stewart, James Mark Awarded:**  **A3**

**Requirements Specification**

|  |
| --- |
| Comments **Criteria** : Format, Descriptions, Rationale, Completeness, Clarity, Verifiability, Unambiguous, Organisation, Structure, Formal language |
| An excellent and comprehensive specification, well done!  There are just some occasions where you need extra detail (or more precise detail). For example, specifying what % of health a player may lose for certain game events. You could specify what a ‘reasonable proximity’ is for locating games near the player. There are some error scenarios to consider too, e.g. what if the game server is down, what if no games are found near to the player – do you need to widen the search radius? What if the player never arrives at the starting location (after an acceptable period of time)? Some other considerations:   * Should player names be unique? * Should there be a time limit for questions? * Do we need to prevent the same question re-appearing twice in the same game? * Can ‘question immunity’ be used for locations where a keystone is won?   You have excellent coverage of the non-functional requirements. NOTE: remember to be specific about what a ‘lower’ frame rate is.  Apart from these issues, an excellent specification; probably one of the most complete specifications I have seen! |
| Grade for this section: A2 / 22 (represents 40% of the total) |

**Use Case Diagram and Specification**

|  |
| --- |
| Comments **Criteria** : Diagram & documentation. Appropriate Actors & use cases, appropriate use of <<extend>> and <<include>>, format and logic of use case descriptions |
| Use Case Diagram  The use case diagram is very good and you have generally avoided the temptation to break the system down into lots of small pieces, i.e. the number of and the size of the use cases is good.  Identification of the actors is very good but there are some others to consider: Facebook, Google Maps.  The names of your actors are good and representative of their roles.  The names of the use cases are very good and are stated from the perspective of the actors. You have two use cases which are closely related around the purpose of moving around locations and interacting with locations. Perhaps there is a more general case that they belong to here, e.g. a player wishes to ‘Look for Keystones’ or similar.  The relationships between actors and use cases are good but arrows should point *towards* the external systems if they are secondary actors.  You have used the <<extend>> relationship on the diagram and there is a degree of validity for some of these but others may have to be reviewed. For example, you are showing ‘Move to Location’ and ‘Interact with Location Types’ as two things which are entirely optional for the player to do once they have started the game (they don’t need to do these things if they don’t want to) AND that they don’t occur very often. I’m not sure if that is the case. You could probably say the ‘Send Message’ is entirely optional and doesn’t happen very often but perhaps that should be extending the main ‘game play’ use cases rather than the ‘Start Game’ use case. So, some things to review here.  Grade for this section: A5 / 19 (represents 12.5% of the total)  Use Case Specifications  Your use case specifications are generally excellent in both detail and structure but a few issues noted below:  Start Game  Excellent. The basic flow ends prematurely though – we have to wait for the player to reach the start location and give them their starting health and bag.  Sending a Message  Very good.  Retrieve messages  Also good.  Buying a Game Pack  Very good again.  Interaction with destination types  The basic flow is OK but you should pick ONE to document, e.g. one specific location – whichever is simplest or most common. You can then show the other locations are alternatives – as you have done. The alternative flows are excellent although there is some repetition of the question logic for question and keystone locations.  Posting a Status Update  Good.  Grade for this section: A3 / 21 (represents 37.5% of the total) |

**Threat Model**

|  |
| --- |
| Comments **Criteria** : Clear indication of trust boundaries; identification of relevant threats; consideration of common threat categories such as STRIDE; suggestions for mitigating threats identified. |
| You don’t appear to have provided a diagram with trust boundaries.  Your analysis of the threats is very good but some additional examples could be mentioned in your discussion. See samples below:  Spoofing: Consider the payment system too. Is it really the payment system that we are sending data to?  Tampering: Consider tampering or hijacking of data while it is being transmitted between different parts of the system. Perhaps also consider an ‘insider’ / employee threat.  Repudiation: Very good. Perhaps you could elaborate what the threats are though, e.g. is it possible for the player to somehow obtain game packs they didn’t pay for and claim they didn’t? Is it possible for a player to post inflammatory messages to other players and claim they didn’t do it?  Information disclosure: very good. Also consider the risk of revealing a user’s location to other people who may wish to track them and harm them.  Grade for this section: B1 / 18 (represents 10% of the total) |