Stakeholder Requirements Specification

(StRS)

For

Hostel Self-Service Kiosk

Version 2.0

February 19, 2020

Prepared by CyberTrack

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**1. Introduction**

**1.1 Business Scope**

CyberTrack is a software development company provide digital solutions to creative agencies and direct to business. We come out with the best innovative options delivering the quality work on time. Hence, This project is mainly use for students and the parents of Multimedia University, This kiosk is focusing on reducing waiting time of check-in and check-out of hostel during registration day and it is a platform to increase the productivity during the day and night while practising the self-service system to the users. The stakeholder requirements are main primary subject for this project just so we can deliver the system to the user as it intends to. We obtain the stakeholder’s requirement from time to time and make sure we will not be astray from the main objective. The stakeholders require a few functionalities in this system and we acknowledge some of them. Our system also provide information regarding the type of room of the hostel. This could spare the hassle of checking them at the counter when the information is only at the fingertips. The stakeholders also require us to include Service Desk system whereas the staff who incharge on managing the hostel can receive the feedbacks from students faster. This feature will allow the student or the parents to make any complain or give suggestions towards the management regarding the hostel services.The stakeholders are encouraged to give a thorough explanation of their requirements just so it could help us to expand our system.

## **1.2 Definition**

Student/Resident - user that wants to use the Hostel Self-Service Kiosk to apply to the MMU hostel accommodation

Staff - the staff of the MMU Hostel that is responsible to manage all hostel services.

Check-In - A process to confirm the student/resident to check-in their hostel room

Check-Out - A process to confirm the student/resident that requested to check-out from their hostel room

Map - a feature where its display the map of MMU hostel and the resident room location.

Room Type - user can use this feature to view the room type that is available in the hostel.

Service Desk - user can file a complaint to the staff through this feature as well as give constructive feedback.

Payment - user can make a payment via an online payment gateway.

# **2. References**

The document that has been prepared in accordance with the following documents:

i. ISO/IEC/IEEE 29148:2011(E), Systems and software engineering - Life cycle processes - Requirements engineering.

**3. Stakeholders Information**

****

Name: Zaki Syahmi bin Zulkifli

Position: Hostel assistant

E-mail: zaki.syahmi@mmu.edu.my

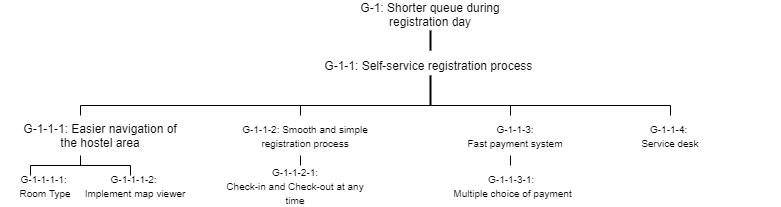
****

Name: Muhammad Safwan Haziq bin Noor Azman

Position: MMU student

E-mail: 116120@student.mmu.edu.my

**4.Goals**

****

**Table 1 : The table below shows the goal template of G-1**

|  |  |  |  |
| --- | --- | --- | --- |
| **No.** | | **Section** | **Context/Explanation** |
| **ID** | **1.2** | **Identifier** | G-1 |
| **2.2** | **Name** | Shorter queue during registration day |
| **Management** | **2.1** | **Authors** | Muhamad Syahmi bin Sabudin |
| **Context** | **3.1** | **Source** | Zaki Syahmi bin Zulkifli (Hostel staff), Popbox kiosk |
| **3.2** | **Responsible stakeholder** | Student, Hostel management |
| **3.3** | **Using stakeholder** | Student |
| **Goal Definition** | **4.2** | **Goal Description** | The system shall reduce the queue of students at the hostel management office during the hostel registration day. |
| **4.3** | **Super-goal** | - |
| **4.4** | **Sub-goals** | G-1-1: Self-service registration process |
| **4.5** | **Other goal dependencies** | - |

**Table 2 : The table below shows the goal template of G-1-1**

|  |  |  |  |
| --- | --- | --- | --- |
| **No.** | | **Section** | **Context/Explanation** |
| **ID** | **1.2** | **Identifier** | G-1-1 |
| **2.2** | **Name** | Self-service registration process |
| **Management** | **2.1** | **Authors** | Muhamad Syahmi bin Sabudin |
| **Context** | **3.1** | **Source** | Zaki Syahmi bin Zulkifli (Hostel staff), CamSys. |
| **3.2** | **Responsible stakeholder** | Student, Hostel management |
| **3.3** | **Using stakeholder** | Student |
| **Goal Definition** | **4.2** | **Goal Description** | The system shall allow students to register themselves into the hostel system without visiting the management office. |
| **4.3** | **Super-goal** | G-1: Shorter queue during registration day |
| **4.4** | **Sub-goals** | G-1-1-1: Easier navigation of the hostel area  G-1-1-2: Smooth and simple registration process  G-1-1-3: Fast payment process |
| **4.5** | **Other goal dependencies** | - |

**Table 3 : The table below shows the goal template of G-1-1-1**

|  |  |  |  |
| --- | --- | --- | --- |
| **No.** | | **Section** | **Context/Explanation** |
| **ID** | **1.2** | **Identifier** | G-1-1-1 |
| **2.2** | **Name** | Easier navigation of the hostel area |
| **Management** | **2.1** | **Authors** | Muhamad Syahmi bin Sabudin |
| **Context** | **3.1** | **Source** | Muhammad Safwan Haziq bin Noor Azman (hostel tenant) |
| **3.2** | **Responsible stakeholder** | N/A |
| **3.3** | **Using stakeholder** | Student |
| **Goal Definition** | **4.2** | **Goal Description** | The system shall make it easier for the student to find rooms and facilities. |
| **4.3** | **Super-goal** | G-1-1: Self-service registration process |
| **4.4** | **Sub-goals** | G-1-1-1-1: Room type  G-1-1-1-2: Map viewer |
| **4.5** | **Other goal dependencies** | - |

**Table 4 : The table below shows the goal template of G-1-1-1-1**

|  |  |  |  |
| --- | --- | --- | --- |
| **No.** | | **Section** | **Context/Explanation** |
| **ID** | **1.2** | **Identifier** | G-1-1-1-1 |
| **2.2** | **Name** | Room Type |
| **Management** | **2.1** | **Authors** | Muhamad Syahmi bin Sabudin |
| **Context** | **3.1** | **Source** | CamSys |
| **3.2** | **Responsible stakeholder** | Hostel Management |
| **3.3** | **Using stakeholder** | Student |
| **Goal Definition** | **4.2** | **Goal Description** | The system shall allow students to view the room type available at the hostel before registering. |
| **4.3** | **Super-goal** | G-1-1-1: Easier navigation of the hostel area |
| **4.4** | **Sub-goals** | - |
| **4.5** | **Other goal dependencies** | - |

**Table 5 : The table below shows the goal template of G-1-1-1-2**

|  |  |  |  |
| --- | --- | --- | --- |
| **No.** | | **Section** | **Context/Explanation** |
| **ID** | **1.2** | **Identifier** | G-1-1-1-2 |
| **2.2** | **Name** | Map viewer |
| **Management** | **2.1** | **Authors** | Muhamad Syahmi bin Sabudin |
| **Context** | **3.1** | **Source** | Google Map application |
| **3.2** | **Responsible stakeholder** | N/A |
| **3.3** | **Using stakeholder** | Student |
| **Goal Definition** | **4.2** | **Goal Description** | The system shall allow students to view the map of the hostel for the location of rooms and the facilities available at the hostel. |
| **4.3** | **Super-goal** | G-1-1-1: Easier navigation of the hostel area |
| **4.4** | **Sub-goals** | - |
| **4.5** | **Other goal dependencies** | - |

**Table 6 : The table below shows the goal template of G-1-1-2**

|  |  |  |  |
| --- | --- | --- | --- |
| **No.** | | **Section** | **Context/Explanation** |
| **ID** | **1.2** | **Identifier** | G-1-1-2 |
| **2.2** | **Name** | Smooth and simple registration process |
| **Management** | **2.1** | **Authors** | Muhamad Syahmi bin Sabudin |
| **Context** | **3.1** | **Source** | Zaki Syahmi bin Zulkifli(Hostel staff), Popbox kiosk. |
| **3.2** | **Responsible stakeholder** | Hostel Management |
| **3.3** | **Using stakeholder** | Student |
| **Goal Definition** | **4.2** | **Goal Description** | The system shall allow students to conduct hostel registration at the kiosk digitally without filling the paper forms at the management office. |
| **4.3** | **Super-goal** | G-1-1: Self-service registration process |
| **4.4** | **Sub-goals** | G-1-1-2-1: Check-in and Check-out at any time |
| **4.5** | **Other goal dependencies** | - |

**Table 7 : The table below shows the goal template of G-1-1-2-1**

|  |  |  |  |
| --- | --- | --- | --- |
| **No.** | | **Section** | **Context/Explanation** |
| **ID** | **1.2** | **Identifier** | **G-1-1-2-1** |
| **2.2** | **Name** | 24/7 registration system |
| **Management** | **2.1** | **Authors** | Muhamad Syahmi bin Sabudin |
| **Context** | **3.1** | **Source** | Zaki Syahmi bin Zulkifli (Hostel staff), Popbox kiosk |
| **3.2** | **Responsible stakeholder** | Hostel management |
| **3.3** | **Using stakeholder** | Student |
| **Goal Definition** | **4.2** | **Goal Description** | The system shall allow students check-in and check-out of their room at any time without the limitation of the office. |
| **4.3** | **Super-goal** | G-1-1-2: Smooth and simple registration process |
| **4.4** | **Sub-goals** | - |
| **4.5** | **Other goal dependencies** | - |

**Table 8 : The table below shows the goal template of G-1-1-3**

|  |  |  |  |
| --- | --- | --- | --- |
| **No.** | | **Section** | **Context/Explanation** |
| **ID** | **1.2** | **Identifier** | G-1-1-3 |
| **2.2** | **Name** | Fast payment process |
| **Management** | **2.1** | **Authors** | Muhamad Syahmi bin Sabudin |
| **Context** | **3.1** | **Source** | Zaki Syahmi bin Zulkifli (Hostel staff), McDonalds self service kiosk. |
| **3.2** | **Responsible stakeholder** | Hostel management, payment provider |
| **3.3** | **Using stakeholder** | Student |
| **Goal Definition** | **4.2** | **Goal Description** | The system shall allow students pay for their hostel fees directly at the kiosk |
| **4.3** | **Super-goal** | G-1-1: Self-service registration process |
| **4.4** | **Sub-goals** | G-1-1-3-1: Multiple choice of payment |
| **4.5** | **Other goal dependencies** | - |

**Table 9 : The table below shows the goal template of G-1-1-3-1**

|  |  |  |  |
| --- | --- | --- | --- |
| **No.** | | **Section** | **Context/Explanation** |
| **ID** | **1.2** | **Identifier** | G-1-1-3-1 |
| **2.2** | **Name** | Multiple choice of payment |
| **Management** | **2.1** | **Authors** | Muhamad Syahmi bin Sabudin |
| **Context** | **3.1** | **Source** | Zaki Syahmi bin Zulkifli (Hostel staff), McDonalds self service kiosk |
| **3.2** | **Responsible stakeholder** | Hostel management, payment provider |
| **3.3** | **Using stakeholder** | Student |
| **Goal Definition** | **4.2** | **Goal Description** | The system shall allow students to choose between paying through online banking or their credit card. |
| **4.3** | **Super-goal** | G-1-1-3: Fast payment process |
| **4.4** | **Sub-goals** | - |
| **4.5** | **Other goal dependencies** | - |

**Table 10 : The table below shows the goal template of G-1-1-4**

|  |  |  |  |
| --- | --- | --- | --- |
| **No.** | | **Section** | **Context/Explanation** |
| **ID** | **1.2** | **Identifier** | **G-1-1-4** |
| **2.2** | **Name** | Service desk |
| **Management** | **2.1** | **Authors** | Muhamad Syahmi bin Sabudin |
| **Context** | **3.1** | **Source** | Zaki Syahmi bin Zulkifli (Hostel staff), CamSys |
| **3.2** | **Responsible stakeholder** | Hostel management |
| **3.3** | **Using stakeholder** | Student |
| **Goal Definition** | **4.2** | **Goal Description** | The system shall allow students to interact with the hostel management through the kiosk. |
| **4.3** | **Super-goal** | G-1-1: Self-service registration process |
| **4.4** | **Sub-goals** | - |
| **4.5** | **Other goal dependencies** | - |

**5. Objective**

* **To provide a refined hostel management system in universities**

Multimedia University (MMU) may improve its system by implementing the hostel management. This would take the MMU to one higher level than the other university which is using the manual system. This system may be good for the students to practise by using the new technology. This would be a good exposure for the students themselves.

* **To Ease and improve the workload of hostel management with user friendly kiosks**

As soon as we implement this system, the workload of the system may have changed moderately. This is because, from collecting data through paper forms, it will be changing to storing data on cloud. This would reduce the usage of paper forms and implementing environmental friendly kiosk in hostel.

* **To save time for students to deal with check in and check out processes**

With the implementationof the self service kiosk, the students will be able to handle the check in and check out process themselves without going to the management office. This way, the students can deal with the process at anytime they desire, without the limitation such as office hours and filling out paper forms.

* **To Reduce the usage of paper forms through the use of digital forms in kiosks**

As students come and go at the hostel, the hostel management goes through a lot of paper for documents used such as registration forms and general helpdesk matters. With the implementation of this system, usage of paper will be drastically reduced as the process will be fully digitalised, making it more environmentally friendly and more efficient.

**6. User Requirement**

|  |  |
| --- | --- |
| **Stakeholder** | **User Requirement** |
| **Student** | - User should be able to log in through their Student ID  - User should be able to check in through the kiosk  - User should be able to check out through the kiosk  - User should be able to send feedback through the kiosk  - User should be able to send complaints through the kiosk  - User should be able to pay hostel fee through the kiosk  - User should be able to view room type  - User should be able to view hostel map  - User should be able to use the kiosk at any time |

**7. Operational Scenarios**

**7.1 Check-in and Check-out feature:**

This feature is responsible to check the students in and out of the hostel and store the data online. This could keep the hassle of keeping the abundance of physical data like registration forms paper. Once they check-in, a few security measures will take place to identify the students identity as a resident of the hostel. Next, the next page will display the details information of their booking. The user is required to verify all the information and a pop box will unlock immediately with OTP(one-time-pin) that will be sent to their phone. The user is required to take the keys or put them from the box provided and their action will be kept as data for safety purposes.

**7.2 Payment feature:**

This feature is responsible for the users to do payment of their deposit on the spot when they are at the hostel compound. The management are required the students or parents to do the payments online but some parents may not want to do the payment until they have seen the condition of the hostel. After they have sightseeing around the hostel and secure the security of their children, they can just do the payment at the kiosk with “pay-wave” method. Before they do the payment, the user must verify their booking with an ID that has been given beforehand. With that, they will be directed to another page which is it will display their information like the students ID, student name, email, room number, and the booking date. This will help the user to verify their booking further. After that, they are required to do the “pay-wave” method to perform the transaction. It is fully cashless and harmless. The users are also reminded to print receipt as physical proof of their payment.

**7.3 Room Type Feature:**

The next feature are room types. The students are required to enter their student id. After the student id is done being verified, it will display the what type of room that the hostel provided which is double sharing and triple sharing rooms. The details of both of the rooms will be listed on what the rooms are provided with. This could keep the hassle from the parents to keep asking about the room as this feature will show in detail the condition of the room. The parents are also able to see the review online done by previous students that used to be tenants from the service desk feature. From there, the parents will be more encouraged to send their children to stay in the hostel.

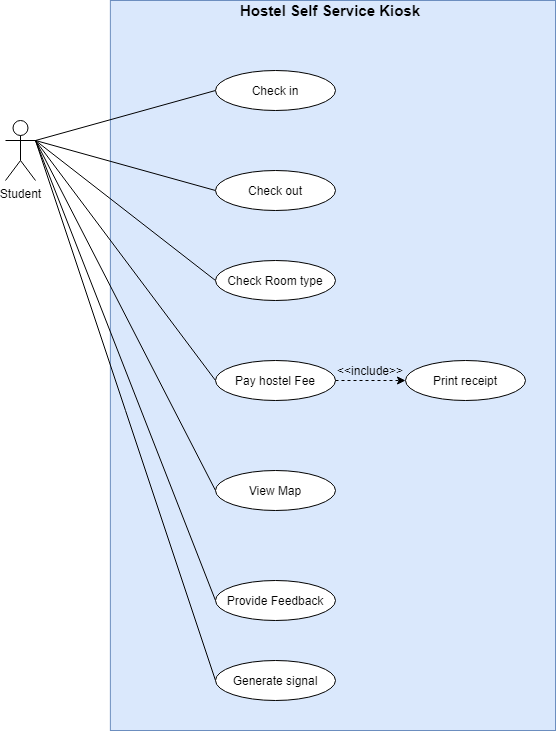
**7.4 Map Feature:**

Also, the kiosk secured a map features which will guide the students to where their rooms are being located. There are 2 buttons that will require the students to enter either using their student id or booking id. For the student id, it needs to be verified first and then it will display the map of MMU hostel while for the booking id, it will display the resident’s details and their room details. This system will show the direction to their room. For instance, it will display which block, level of the building and the rooms number.

**7.5 Feedback:**

The kiosk contains feedback. Throughout the features, the students need to enter students email, then it will be verified. The students email will also help the management to reach out to students after a complaint has been made. For example, the students will be given a few questions so that the students can rate the problem just to show how severe the problem is.

**7.6. Use Case Diagram**



**7.7 Use Case Template**



**Table 12 : Table below shows the use case template for Check in use case**

|  |  |  |  |
| --- | --- | --- | --- |
| **No.** | | **Section** | **Content/Explanation** |
| **ID** | 1.2 | Name | Check in |
| **Management** | 2.1 | Author | Muhamad Ridzwan bin Ziauddin |
| **Context** | 3.1 | Source(s) | Zaki Syahmi bin Zulkifli (Hostel staff), CamSys. |
| 3.2 | Responsible stakeholder(s) | Student, Hostel management |
| **Use Case Definition** | 4.2 | Short Description | The student can check in to their rooms through the kiosk |
| 4.4 | Associated goal(s) | G-1-1: Self-service registration process  G-1-1-2: Smooth and simple registration process |
| 4.5 | Primary actor(s) | Student |
| 4.6 | Other actor(s) | N/A |
| 4.7 | Precondition | The room is booked. |
| 4.9 | Postcondition | The student is checked in |
| 4.10 | Result(s) | The room key’s locker number is displayed |
| 4.11 | Main scenario | 1. The student is logged in to the kiosk.  2. The student clicks on the “Check-in” button.  3. The student will be required to fill in the check in information.  4. The student then will be successfully checked in  5. A locker with the room key will be displayed and unlocked. |
| 4.12 | Alternative scenario | N/A |
| 4.13 | Exception scenario | N/A |
| 4.13 | Quality requirement(s) | N/A |
| **Relationship** | 5.2 | Use case(s) |  |

**Table 13 : Table below shows the use case template for Check out use case**

|  |  |  |  |
| --- | --- | --- | --- |
| **No.** | | **Section** | **Content/Explanation** |
| **ID** | 1.2 | Name | Check out |
| **Management** | 2.1 | Author | Muhamad Ridzwan bin Ziauddin |
| **Context** | 3.1 | Source(s) | Zaki Syahmi bin Zulkifli (Hostel staff), CamSys. |
| 3.2 | Responsible stakeholder(s) | Student, Hostel management |
| **Use Case Definition** | 4.2 | Short Description | The student can check out of their rooms through the kiosk |
| 4.4 | Associated goal(s) | G-1-1: Self-service registration process  G-1-1-2: Smooth and simple registration process |
| 4.5 | Primary actor(s) | Student |
| 4.6 | Other actor(s) | N/A |
| 4.7 | Precondition | The room is checked in. |
| 4.9 | Postcondition | The student is checked out. |
| 4.10 | Result(s) | The login page is displayed |
| 4.11 | Main scenario | 1. The student is logged in to the kiosk.  2. The student clicks on the “Check-out” button.  3. The student will be required to fill in the check out information.  4. The student then will be successfully checked  5. A locker will unlock for the student to return their room key |
| 4.12 | Alternative scenario | N/A |
| 4.13 | Exception scenario | N/A |
| 4.13 | Quality requirement(s) | N/A |
| Relationship | 5.2 | Use case(s) |  |

**Table 14 : Table below shows the use case template for Check room type use case**

|  |  |  |  |
| --- | --- | --- | --- |
| **No.** | | **Section** | **Content/Explanation** |
| **ID** | 1.2 | Name | Check room type |
| **Management** | 2.1 | Author | Muhamad Ridzwan bin Ziauddin |
| **Context** | 3.1 | Source(s) | CamSys |
| 3.2 | Responsible stakeholder(s) | Hostel Management |
| **Use Case Definition** | 4.2 | Short Description | The student can view the room type available at the hostel |
| 4.4 | Associated goal(s) | G-1-1-1-1 : Room Type  G-1-1-1: Easier navigation of the hostel area |
| 4.5 | Primary actor(s) | Student |
| 4.6 | Other actor(s) | N/A |
| 4.7 | Precondition | N/A |
| 4.9 | Postcondition | The room type will be displayed |
| 4.10 | Result(s) | The student can now view the room type |
| 4.11 | Main scenario | 1. The student is logged in to the kiosk.  2. The student clicks on the “Check Room Type” button.  3. The kiosk will display the available room type at the hostel. |
| 4.12 | Alternative scenario | N/A |
| 4.13 | Exception scenario | N/A |
| 4.13 | Quality requirement(s) | N/A |
| **Relationship** | 5.2 | Use case(s) | N/A |

**Table 15 : Table below shows the use case template for Pay hostel fee use case**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| No. | | Section | Content/Explanation | | | |
| **ID** | 1.2 | Name | Pay hostel fee | | | |
| **Management** | 2.1 | Author | Muhamad Ridzwan bin Ziauddin | | | |
| **Context** | 3.1 | Source(s) | Zaki Syahmi bin Zulkifli (Hostel staff), McDonalds self-service kiosk. | | | |
| 3.2 | Responsible stakeholder(s) | Hostel management, payment provider | | | |
| **Use Case Definition** | 4.2 | Short Description | The student can pay their hostel fees through the kiosk | | | |
| 4.4 | Associated goal(s) | G-1-1-3: Fast payment process  G-1-1-3-1: Multiple choice of payment | | | |
| 4.5 | Primary actor(s) | Student | | | |
| 4.6 | Other actor(s) | Hostel Management | | | |
| 4.7 | Precondition | The room is booked. | | | |
| 4.9 | Postcondition | Payment is successful | | | |
| 4.10 | Result(s) | Outstanding hostel fees updated | | | |
| 4.11 | Main scenario | 1. The student is logged in to the kiosk  2. The student clicks on the “Pay Hostel Fee” button.  3. The kiosk asks for the payment option.  4. The student uses debit/credit card to continue with the payment.  5. The student enters the amount for the payment.  6. The kiosk asks for confirmation for the payment.  7. The student confirms the payment.  8. The kiosk will display a “Payment Successful” message. | | | |
| 4.12 | Alternative scenario | 2a | The student chooses online banking as payment option | | |
| 2a1 | The kiosk will redirect to the selected bank’s website. | |
| Proceed to step 5 | | |
| 4.13 | Exception scenario | 3a | The kiosk detects an insufficient balance from the bank account | | |
| 3a1 | | The student is informed that the payment option selected has an insufficient balance |
| 4.13 | Quality requirement(s) | N/A | | | |
| **Relationship** | 5.2 | Use case(s) | Include “Print receipt” | | | |

**Table 16 : Table below shows the use case template for View map use case**

|  |  |  |  |
| --- | --- | --- | --- |
| **No.** | | **Section** | **Content/Explanation** |
| **ID** | 1.2 | Name | View map |
| **Management** | 2.1 | Author | Muhamad Ridzwan bin Ziauddin |
| **Context** | 3.1 | Source(s) | Google Map application |
| 3.2 | Responsible stakeholder(s) | N/A |
| **Use Case Definition** | 4.2 | Short Description | The student can view the map of the hostel |
| 4.4 | Associated goal(s) | G-1-1-1-2: Map viewer  G-1-1-1: Easier navigation of the hostel area |
| 4.5 | Primary actor(s) | Student |
| 4.6 | Other actor(s) | N/A |
| 4.7 | Precondition | N/A |
| 4.9 | Postcondition | The hostel map is displayed |
| 4.10 | Result(s) | The student can now view the hostel map |
| 4.11 | Main scenario | 1. The student is logged in  2. The student clicks the “View Map” button.  3. The hostel map will be displayed. |
| 4.12 | Alternative scenario | N/A |
| 4.13 | Exception scenario | N/A |
| 4.13 | Quality requirement(s) | N/A |
| **Relationship** | 5.2 | Use case(s) | N/A |

**Table 17 : Table below shows the use case template for Provide feedback use case**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **No.** | | **Section** | **Content/Explanation** | | |
| **ID** | 1.2 | Name | Provide Feedback | | |
| **Management** | 2.1 | Author | Muhamad Ridzwan bin Ziauddin | | |
| **Context** | 3.1 | Source(s) | Zaki Syahmi bin Zulkifli (Hostel staff), CamSys | | |
| 3.2 | Responsible stakeholder(s) | Hostel management | | |
| **Use Case Definition** | 4.2 | Short Description | The student will be able to access the service desk through the kiosk | | |
| 4.4 | Associated goal(s) | G-1-1-4: Service Desk | | |
| 4.5 | Primary actor(s) | Student | | |
| 4.6 | Other actor(s) | N/A | | |
| 4.7 | Precondition | The student account is active. | | |
| 4.9 | Postcondition | The information is filled | | |
| 4.10 | Result(s) | The content will be sent to hostel management | | |
| 4.11 | Main scenario | 1. The student is logged in.  2. The student clicks the “Service Desk” button.  3. The kiosk will display two options.  4. The student selects the “Feedback” button.  5. The kiosk will display the feedback page for the student to fill in.  6. The student submits the feedback.  7. The kiosk will display “Response sent” message. | | |
| 4.12 | Alternative scenario | 4a | The student chooses the “Complaint” button. | |
| 4a1 | The kiosk will display the Complaint page |
| 4a2 | The student submits the complaint |
| Proceed to step 7 | | |
| 4.13 | Exception scenario | N/A | | |
| 4.13 | Quality requirement(s) | N/A | | |
| **Relationship** | 5.2 | Use case(s) |  | | |

**Table 18 : Table below shows the use case template for Generate Signal use case**

|  |  |  |  |
| --- | --- | --- | --- |
| **No.** | | **Section** | **Content/Explanation** |
| **ID** | 1.2 | Name | Generate Signal |
| **Management** | 2.1 | Author | Muhamad Ridzwan bin Ziauddin |
| **Context** | 3.1 | Source(s) | Zaki Syahmi bin Zulkifli (Hostel staff), CamSys |
| 3.2 | Responsible stakeholder(s) | Hostel management |
| **Use Case Definition** | 4.2 | Short Description | The student will be able to send emergency signal to security guard using the kiosk |
| 4.4 | Associated goal(s) | G-1-1-4: Service Desk |
| 4.5 | Primary actor(s) | Student |
| 4.6 | Other actor(s) | N/A |
| 4.7 | Precondition | N/A |
| 4.9 | Postcondition | The signal is generated. |
| 4.10 | Result(s) | The signal will be sent to security guard. |
| 4.11 | Main scenario | 1. The student clicks the “Help” button.  2. The kiosk will generate signal.  3. The signal is sent to all security guard. |
| 4.12 | Alternative scenario | N/A |
| 4.13 | Exception scenario | N/A |
| 4.13 | Quality requirement(s) | N/A |
| **Relationship** | 5.2 | Use case(s) | N/A |

**Table 19: Table below shows the use case template for Print receipt use case**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **No.** | | **Section** | **Content/Explanation** | | |
| **ID** | 1.2 | Name | Print receipt | | |
| **Management** | 2.1 | Author | Muhamad Ridzwan bin Ziauddin | | |
| **Context** | 3.1 | Source(s) | McDonalds self-service kiosk. | | |
| 3.2 | Responsible stakeholder(s) | N/A | | |
| **Use Case Definition** | 4.2 | Short Description | A printed payment fees receipt will be generated for the student | | |
| 4.4 | Associated goal(s) | N/A | | |
| 4.5 | Primary actor(s) | Student | | |
| 4.6 | Other actor(s) | N/A | | |
| 4.7 | Precondition | Successful payment fee transaction | | |
| 4.9 | Postcondition | Print the receipt | | |
| 4.10 | Result(s) | Student receive printed receipt | | |
| 4.11 | Main scenario | 1. The student has done a successful payment. 2. Receipt is given based on the payment. 3. Redirect user to landing page. | | |
| 4.12 | Alternative scenario | N/A | | |
| 4.13 | Exception scenario | 1a | Run out of receipt paper | |
| 1a1 | The kiosk will display a message notifying no receipt paper |
| Proceed to step 3. | | |
| 4.14 | Quality requirement(s) | N/A | | |
| **Relationship** | 5.2 | Use case(s) | N/A | | |

**8. Project Constraints**

The time constraint to develop the system is six months. The system shall be developed with the maximum cost of RM 100,000.00 excluding the recurring cost such as continued support and management software. Building a high quality software normally involve long time constraint and high cost. However, building a good enough software could minimize the cost and time for the system development. The process model to be used for the system development is prototyping. By using prototype process model, the stakeholder can actively involve in the development process and errors can be detected much earlier. This can help to minimize the project cost.

**9. Task Delegation**Table 1.1 below shows the division of task that have been delegated by all the members in this group for this project development on preparing the documentation and the background study.

|  |  |  |  |
| --- | --- | --- | --- |
| **TASKS** | **STUDENTS** | | |
|  | Azlin | Ridzwan | Syahmi |
| Introduction | **X** |  |  |
| References | **X** |  |  |
| Stakeholder Information |  | X | X |
| Goal |  | X | X |
| Objective |  | X | X |
| User Requirement |  | X | X |
| Operational Scenarios | X |  |  |
| Project Constraints | X |  |  |
| Meeting Minutes | X |  |  |

**10. Appendix A: Meeting minutes**

**Meeting 1:**

|  |
| --- |
| 1. **Purpose of Meeting** |
| First Meet of STRS team meeting |

|  |  |  |
| --- | --- | --- |
| 1. Date of Meeting | 1. Attendees | 1. Location |
| 14th of January (2 P.M.) | Wan Azlin  Ridzwan  Syahmi | FACULTY OF COMPUTING |

|  |  |  |
| --- | --- | --- |
| 1. Meeting Agendas |  |  |
| 1. Delegate task 2. Discuss about possible content in STRS | | |

**Meeting 2:**

|  |
| --- |
| 1. **Purpose of Meeting** |
| Second Meeting of STRS team |

|  |  |  |
| --- | --- | --- |
| 1. Date of Meeting | 1. Attendees | 1. Location |
| 17 January (2 P.M.) | Wan Azlin  Ridzwan  Syahmi | FACULTY OF ENGINEERING  (TUTORIAL ROOM) |

|  |  |  |
| --- | --- | --- |
| 1. Meeting Agendas |  |  |
| 1. Discuss about the stakeholder information 2. Book a meeting with staff MMU 3. Getting information from student stakeholder | | |

**Meeting 3:**

|  |
| --- |
| 1. **Purpose of Meeting** |
| Third Meeting of STRS team |

|  |  |  |
| --- | --- | --- |
| 1. Date of Meeting | 1. Attendees | 1. Location |
| 21 January (2 P.M.) | Wan Azlin  Ridzwan  Syahmi | FACULTY OF COMPUTING |

|  |  |  |
| --- | --- | --- |
| 1. Meeting Agendas |  |  |
| 1. Gather information that we obtained previously 2. Discussed for the possible content that we could add up 3. Finishing project | | |