**University of Louisiana at Lafayette**

**Requirements**

**UL Housing Assignment – CMPS 453**

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# Abstract

The document below will address the following functional and non-functional requirements presented in the project. The use case diagram will exhibit the basic use cases the customer will apply within the system. Besides the functional requirements given by the customer, there are a few non-functional requirements the team has decided upon such as user accessibility, reliability, and application efficiency.

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**USE CASE DIAGRAM**

**Use Cases (Scenarios)**

Student

Administrator

Database

Database

Database

Database

Figure : Room Storage Use Case

|  |  |
| --- | --- |
| Use Case Name | Requesting a new room |
| Participating Actors | Students |
| Flow of Events | 1. Student enters website. 2. Student fills out application. 3. Student submits application. 4. Confirmation email is sent to school email address. 5. Student confirms email address. 6. Request is sent to queue of requests. |
| Alternate Flows | 3a. Information is not completely filled.  3b. Display error message.  3c. Remain on page.  4a. CLID is invalid.  4b. Display error message.  4c. Remain on page. |
| Entry Condition(s) | Student has a valid CLID. |
| Exit Condition(s) | Form is correctly filled out and entered; alternately, user cancels request. |
| Special Requirements | N/A |

Table - Use Case: Request Room

|  |  |
| --- | --- |
| Use Case Name | Administrator Login |
| Participating Actors | Students |
| Flow of Events | 1. Admin enters website. 2. Administrator select the link for logging in. 3. Administrator enters credentials. 4. Administrator submits credentials. 5. Request Queue displayed. |
| Alternate Flows | 4a. Username or password is invalid.  4b. Display error message.  4c. Remain on page. |
| Entry Condition(s) | Administrator has a valid username and password. |
| Exit Condition(s) | User presses return button; |
| Special Requirements | Must be registered within the program as an admin for the correct privileges. |

Table – Administrator Login

|  |  |
| --- | --- |
| Use Case Name | Accept/Deny Request |
| Participating Actors | Students |
| Flow of Events | 1. Administrator successfully logs in to website. 2. Website presents all requests in the form of a list with an accept and deny button for each item. 3. Administrator selects either accept or deny. 4. Request is removed from the queue. 5. Email containing the decision is sent to the student. 6. Page refreshes to show new queue. |
| Alternate Flows | N/A |
| Entry Condition(s) | Administrator has logged in. |
| Exit Condition(s) | User presses log out button. |
| Special Requirements | Must be registered within the program as an admin for the correct privileges. |

Table - Accept/Deny Request

# RATIONALE

It was determined that, in order to efficiently perform any of the client’s tasks, a database would be necessary. Since all of the tasks needed one, it was decided that all of the projects would be completely based around the database. The only extra things required will be interfaces unique to the individual projects.

# NON-FUNCTIONAL REQUIREMENTS

**Product requirement**

The requirements include execution speed, reliability and accessibility of the system .The room-change system should be available to all current residents on campus during weekdays and weekends. Downtime for site maintenance shall not exceed 24 hours. The system should be easy to use by residents and should be organized in such a way that user errors are minimized.

**Organizational requirement**

Users of the room-change system shall authenticate themselves using their CLID and user-defined password. Priority of the room-change service should follow the first-come, first-served practice.

**External requirement**

The system shall implement resident privacy provisions. Maintenance should be done on the system regularly.

# REFERENCES

Badgerati. “Software Engineering – Use Case Diagrams / Descriptions.” *Computer Science Source*. Computer Science Source, 22 Nov 2009. Web. 29 Sep 2014.