

**CAPSTONE PROJECT 1**

**ARCHITECTURE DESIGN DOCUMENT**

**ROOMY SYSTEM**

**CODE:** ARCHITECTURE DESIGN - Version: 1.2

**DATE:** Sep 10, 2018

**Blue Team**

International School – Duy Tan University

**PROJECT INFORMATION**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Project Title | Roomy System | | | |
| Star Date | Aug 15, 2018 | **End Date** | Dec 5, 2018 | |
| Lead Institution | International School, Duy Tan University | | | |
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**ARCHITECTURE DESIGN DOCUMENT**

|  |  |  |  |
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| Document Title | Architecture Design | | |
| Reporting Period | Sep, 2018 |  |  |
| Author(s) & project | Blue Team | | |
| Date | Sep 20th 2018 | **Fieldname** | Architecture design ver 1.2 |
| Access | Project and CMU program | | |

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| 1.0 | Team | Sep 7th, 2018 | Draft. |
| 1.1 | Huynh Vu Ha Lan | Sep 9th, 2018 | Update Introdustion |
| 1.2 | Le Hoang Quoc | Sep 20th, 2018 | Fix C&C view, Module view. |

**SIGNATURE**

**Document Approvals:** The following signatures are required for approval of this document.

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| Phan Van Son Mentor |  | Date |
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1. **Introduction:**

The agile product backlog in Scrum is a prioritized features list, containing short descriptions of all functionality desired in the product. When applying Scrum, it’s not necessary to start a project with a lengthy, upfront effort to document all requirements. Typically, a Scrum team and its product owner begin by writing down everything they can think of for agile backlog prioritization. This agile product backlog is almost always more than enough for a first sprint. The Scrum product backlog is then allowed to grow and change as more is learned about the product and its clients.

* 1. **Purpose:**
  + Provide a prioritized features list, containing short description of all functionality desired in the product.
  + Lists everything that the product owner and Scrum team feels should be included in the software they are developing.
  1. **Documents References:**

|  |  |
| --- | --- |
| **No** | **References** |
| **1** | Product Backlog Document |
| **2** | Project Plan Document |

1. **Project Statement:**
   1. **Project Overview:**

* Project name: Roomy System.
* Development team: Blue Team

|  |  |  |  |
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**Table 1: Team Members**

* 1. **Business Driver:**
* **Project Definition:**
  + - Roomy System is known as a system to help users find accommodation suitable for their needs.
    - This system allows landlords to provide information about the places they want to rent and manage them; allows renter to search for information on accommodation based on their needs from which to choose the right accommodation.
* **Business needs:**

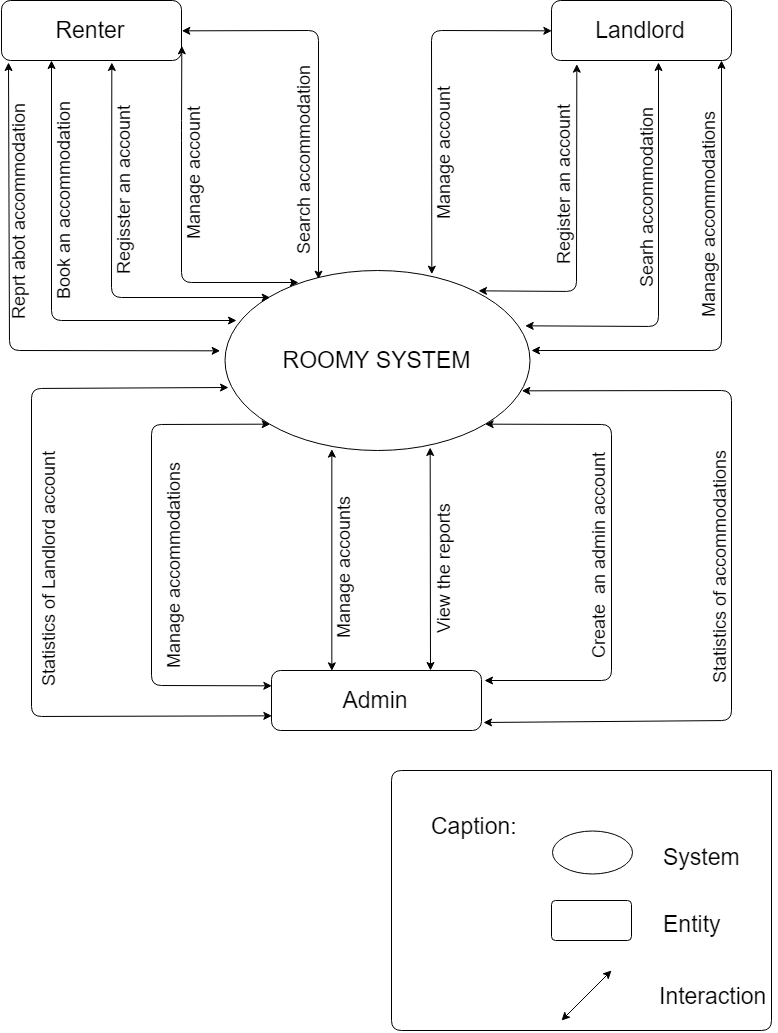
**Architecture Driver:**

* 1. **High-Level Requirements:**

|  |  |
| --- | --- |
| User Story ID | Priority |
| US01 | 3 |
| US02 | 3 |
| US03 | 3 |
| US04 | 2 |
| US05 | 1 |
| US06 | 1 |
| US07 | 3 |
| US08 | 2 |
| US09 | 1 |
| US10 | 1 |
| US11 | 1 |
| US12 | 2 |
| US13 | 1 |
| US14 | 2 |
| US15 | 2 |

**Table 2: High-Level Requirements**

* 1. **System Context:**

****

*Figure 1: Context Diagram*

* 1. **Quality Attributes:**

|  |  |
| --- | --- |
| **Quality Attributes** : Availability |  |
| **Stimulus** | Client request |
| **Source(s) of the stimulus** | Users |
| Environment | Normal Operator |
| Artifact | The system. |
| **System response** |  |
| **Response measure(s)** | Response in less than 2 seconds |

Table 3: Quality Attribute

1. **Constraint:**
   1. **Business Constraint:**
      * Project will be started on: 15/08/2018
      * Project will be finished on: 5/12/2018
      * Project will be finished in: 120 days.
   2. **Technical Constraint:**

* **Technical for development:**
  + - * Language: PHP
      * Develop Tools:
      * Database:
* **Environment:**
  + Operating system:
* **Other Constraints:**
  + Resource: 5 people.
  + Budget: Limited.
  + Time:

1. Technology: **High level Architecture** 
   1. **Component and Connection View (C&C View):**

The diagram below shows the overview architecture including component and other related component. We have representations and behaviors for important components in the following sections.



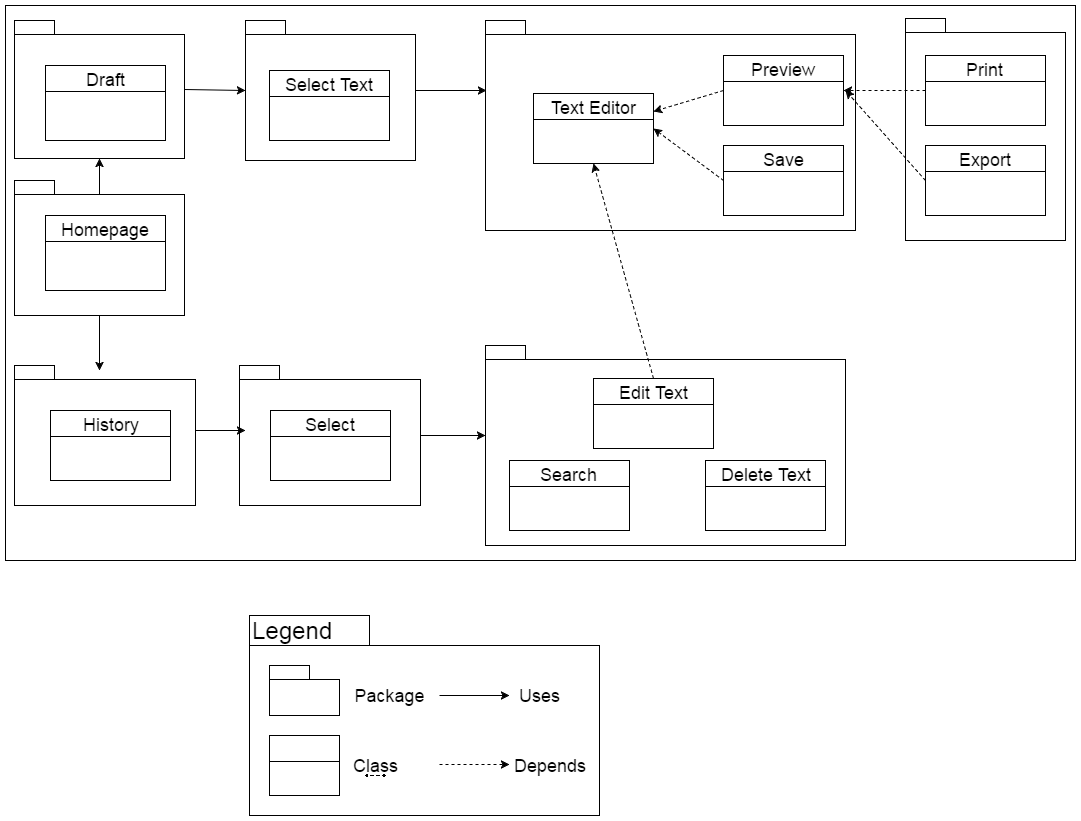
*Figure 2: C&C View*

* Prose:
* One user accessed to system, the front-end interface will be displayed. With these front-end interfaces, user can go around the entire of the application. They can know which functions are on system easily. From that, database from server can be transacted to users by back-end working. The entire of website will have some main functions that will be presented in the table blow.
* The table below gives a brief explanation for the key elements in the C&C view:

***Table 8: Brief explanation for the key elements in C&C view***

|  |  |
| --- | --- |
| **Element** | **Description** |
| Homepage | The element will allow users to see homepage of tools. |
| Draft | The element will allow users to open [Drafting] Form |
| Select Text | The element will allow users to select type of administrative documents which they want editor. |
| Text Editor | The element will allow users to text editor. |
| Preview | The element will allow users to preview the text after they are text editor complete. |
| Save | The element will allow users to save data. |
| Print | The element will allow users to print document. |
| Export | The element will allow users to export document. |
| History | The element will allow users to open [History] Form |
| Select | The element will allow users to select type of administrative documents which they want view history. |
| Search | The element will allow users to search administrative documents. |
| Edit Text | The element will allow users to edit the old administrative documents. |
| Delete Text | The element will allow users to delete the administrative documents out of history. |
| Administrative documents management | The element is save all information about administrative documents. |

* 1. **Module view:**

****

*Figure 3: Module View*

* Prose:
* These modules have relationship and interactive each other to create this tool. The functionality interact each other, relationship will be defined by arrows.

***Table 9: Brief explanation for the key elements in Module view***

|  |  |
| --- | --- |
| Element | Description |
| Homepage | This module is responsible for showing homepage of tool. |
| Draft | This module is responsible for showing [Drafting] form. |
| Select Text | This module is responsible for selecting type of administrative documents which they want editor. |
| Text Editor | This module is responsible for editing the text by form that user want to edit. |
| Preview | This module is responsible for previewing administrative documents after user is complete. |
| Save | This module is responsible for saving administrative document. |
| Print | This module is responsible for printing administrative documents. |
| Export | This module is responsible for exporting administrative documents. |
| History | This module is responsible for showing [History] form. |
| Select | This module is responsible for selecting type of administrative documents which they want view history. |
| Search | This module is responsible for searching administrative documents. |
| Edit Text | This module is responsible for editing the old administrative documents. |
| Delete Text | This module is responsible for deleting the administrative documents out of history. |

* 1. **Allocation view :**



*Figure 4: Allocation View*