**CHAPTER 1**

**THE PROJECT OVERVIEW**

**Introduction and Rationale**

The College of Computer Studies students are still having troubles on their Programming 1 and 2 major subjects, especially 1st year students. Most of them say that the major subject is too hard for them to understand if the teacher only keeps giving exercises and not explaining the topic properly and that’s why most of them were forced to retake the subject because they failed the subject. Most of them also say that they find the teachers discussions too boring for them. And since then, it has been considered as a plague, spreading, where many of fresh students failed at their very first try of the subject at their fresh start of their college life. For that very reason, we, the researchers, have decided to create a web game wherein the users can code and explore the contents of the game. The game focuses on improving the user’s ability to code and the ability to react to what the NPC give to the user. It will be designed according to the needs and requirements of the respondent.

**Statement of the Objectives**

**General Objectives**

Develop a web based role playing game that will test the user’s knowledge in various programming languages for the students of the College of Computer Studies or any users that is interested in playing that game

**The study specifically aims to:**

1. Register students/users to the system.
2. Allow students/users to log in to the system with their Username and Password.
3. Allow students/users to start a new progress or continue and view their scores in the game.
4. Allow students/users to explore and defeat monsters by following the monsters task as they progress through the game
5. Allow students/users to create their character by choosing the desired gender
6. Allow students/users to choose what programming language to play the game
7. Allow students/users to save or delete their progress anytime.

**Scope of the Study**

The project can be used by anyone who is interested in programming. Also for those students who’ve failed the programming 1 and 2 subject and likes learning applications and at the same time, make them entertained. The project is a system software that is efficient and effective to use. The respondents of the study are the students of College of Computer Studies, or simply, anyone.

Furthermore, the study will be conducted to LSU-Ozamiz City College of Computer Studies.

**Significance of the Study**

**Students:** The students can only use the software by logging in using their credentials entered in the registration interface. The student is able to register to the system, able to log in after registration, able to continue their game or create a new one, and lastly, view their scores after they have completed the game.

**Admin:**

**Operational Definition of Terms**

|  |  |
| --- | --- |
| **Term** | **Description** |
| **Administrator** | The one who manages the software |
| **Architectural Design** | Architectural design defines the relationship between major structural elements of the software, the architectural styles and design patterns that can be used to achieve the requirements defined for the system, and the constraints that affect the way in which architecture can be implemented [Sha96]. |
| **Component Level Design** | Component-level design transforms structural elements of the software architecture into a procedural description of software components. Information obtained from the class-based models, flow models, and behavioral models serve as the basis for component design. |
| **Database** | Virtual storage where user’s accounts with the specific saved file are stored |
| **Deployment Diagram** | Deployment diagram focuses on the structure of a software system and is useful for showing the physical distribution of a software system among hardware platforms and execution environments. |
| **DFD** | Data Flow Diagram. A graphical depiction of data processes, data flows, and data stores in a business system. |
| **NPC** | Non-Playable Character |
| **Programming** | The action or process of writing computer programs. |
| **Programming Language** | is a formal language that specifies a set of instructions that can be used to produce various kinds of output |
| **SPMP** | Software Project Management Plan. The deliverable which consists of the project plan. |
| **SDD** | Software Design Description. The deliverable which consists of the project’s requirements specifications, features, and other qualities of the project. |
| **Sequence Diagram** | In UML, a diagram that illustrates a succession of interactions between object instances over time. Often used to illustrate the processing described in use case scenarios. |
| **Software Quality Assurance** | a process that ensures that developed software meets and complies with defined or standardized quality specifications. |
| **SRS** | Software Requirements Specification. The deliverable which consists of the project’s requirements specifications, features, and other qualities of the project. |
| **Use Case Diagram** | a **use case** is a list of actions or event steps, typically defining the interactions between a role (known in the [Unified Modeling Language](https://en.wikipedia.org/wiki/Unified_Modeling_Language" \o "Unified Modeling Language) as an *[actor](https://en.wikipedia.org/wiki/Actor_(UML)" \o "Actor (UML))*) and a system, to achieve a goal. |
| **User** | a person who uses or operates something, especially a computer or other machine. |