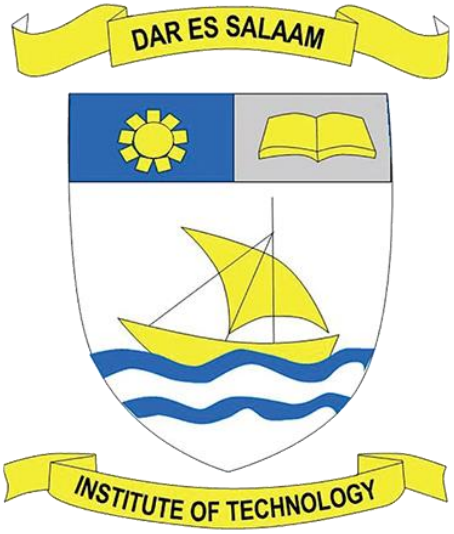
DAR ES SALAAM INSTITUTE OF TECHNOLOGY



COU 07505: SOFTWARE ENGINEERING

SOFTWARE REQUIREMENTS SPECIFICATIONS:

ONLINE LOCAL FREELANCE PORTAL

NAME: *EMMANUEL I. TARIMO*

REGNO: *200230228468*

DEPARTMENT: *COMPUTER STUDIES*

CLASS: *BENG20-COE1*

ACADEMIC YEAR: *2022/2023*

LIST OF ABBREVIATIONS.

- **CSS** – Cascading Style Sheet.
- **HTML** – Hypertext Markup Language.
- **JS -** JavaScript.
- **MTTRS** – Mean Time to Restore System.
- **POSTGRESQL** – Postgre Structured Query Language

LIST OF FIGURES

TERMS AND DEFINITIONS

BACKEND TECHNOLOGY – It usually refers to the collections of server-side languages used to build a website's server setup.

DATABASE - Is an organized collection of data stored and accessed electronically.

FRONTEND TECHNOLOGY – Is the technology that facilitates what we see and interact with as the visitors of a website, or as the end-user of a mobile app.

SOFTWARE REQUIREMENT SPECIFICATION - A document that completely describes all of the functions of a proposed system and the constraints under which it must operate. For example, this document.

USER – Can be a freelancer/visitor.

VISITOR - Anyone navigating the site to view gigs and services.

Table of Contents

1.0 Scope of the Project.

1.1 About the Project

Online local freelance portal is a web platform on which freelancers and visitors interact with each other. In this platform a freelancer usually posts their business or service and many visitors come into the site to find potential freelancers to work on their project. After the visitors have reviewed the freelancer's portfolio, they can then contact the specific freelancer of their liking. In this way the visitor gets the required job done and the freelancer earns money. Platforms like Fiverr allows a freelancer to sell his services to the employers. This project aims to develop a freelance exhibit where a freelancer could increase brand awareness or recruit potential prospects. Such an exhibit, relies more on storytelling with the history and values of the business and services provided by the freelancer.

1.2 Business Requirement Analysis.

- A freelancer can add their business and service as well as their charging rate per work done for visitors to see.
- Whenever a freelancer signs up at the platform, they are required to be verified by the Admin for their business/service to appear at the front page.
- Admin can remove or take down a business'/service's gig whenever the confidentiality and the platforms' terms and conditions are broken by the freelancer.
- Visitors can search for the service/business they wish.

1.3 Problem statement.

To provide a marketplace where creative, talented and professionals such as artists, painters, carpenters, and web developers can exhibit their services to employers to alleviate lack of employment and difficulty of employers in searching for manpower to work on their job/activities locally.

1.4 Proposed System.

The proposed system is an online freelance portal which enables quick and easy display of services with corresponding pricing for employers to view. This will enable the employers to find perfect candidates for tenders and contracts for their activities. It also alleviates false and incompetent freelancers by validation of their current works and certifications as per required.

2.0 Overall Description

2.1 Functional and Non-Functional Requirements.

2.1.1 Functional Requirements.

The following are the key functional requirements of proposed Project:

- Sign In and User Registration.
- User Management (Approving/Rejecting freelancer registration requests).
- Freelancer Dashboard (Proper interfaces for managing freelancer related job postings).
- Admin Interface (An interface for the management of all admin related tasks such as approving users).
- Service Search for visitor.

2.1.2 Non-Functional requirements.

- **Availability:**

  The web dashboard must be available to users 99.98 percent of the time every month during business hours.
- **Reliability:**

  The system must perform without failure in 95 percent of use cases during a month.
- **Maintainability.**

  The mean time to restore the system (MTTRS) following a system failure must not be greater than 10 minutes. MTTRS includes all corrective maintenance time and delay time.
- **Security:**

  The system is implemented using very secure frontend and backend technologies i.e. Django framework and Bootstrap.

2.2 Use case diagrams.

2.2.1 Freelancer's Use Case diagram.

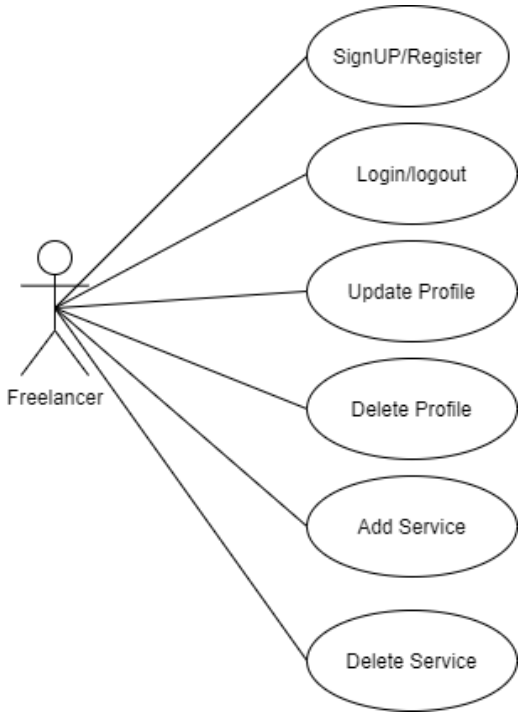


Figure 1: Freelancer's Use Case Diagram

2.2.2 Visitor's Use Case Diagram.

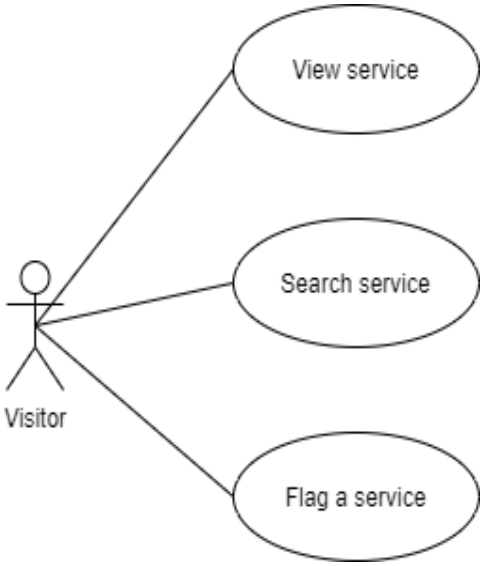


Figure 2: Visitor's Use Case Diagram

2.2.3 Admin Use Case Diagram.

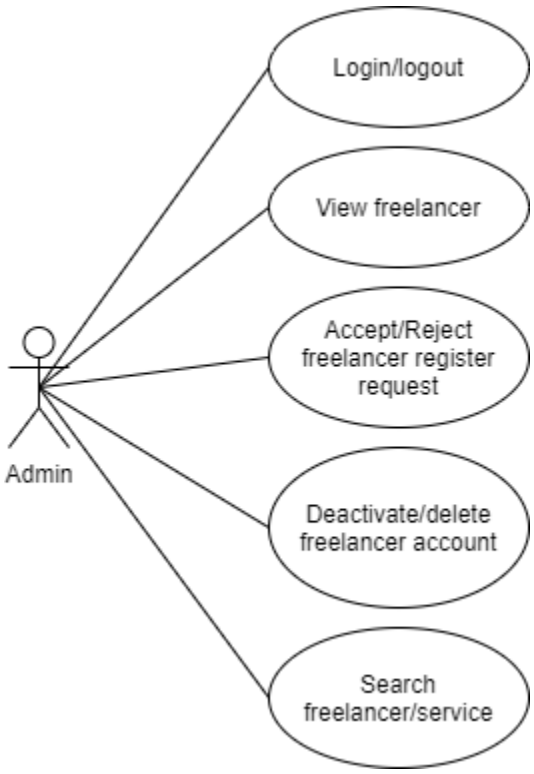


Figure 3: Admin Use Case Diagram

2.3 Flowchart Diagrams.

2.3.1 Freelancer's flowchart diagram.

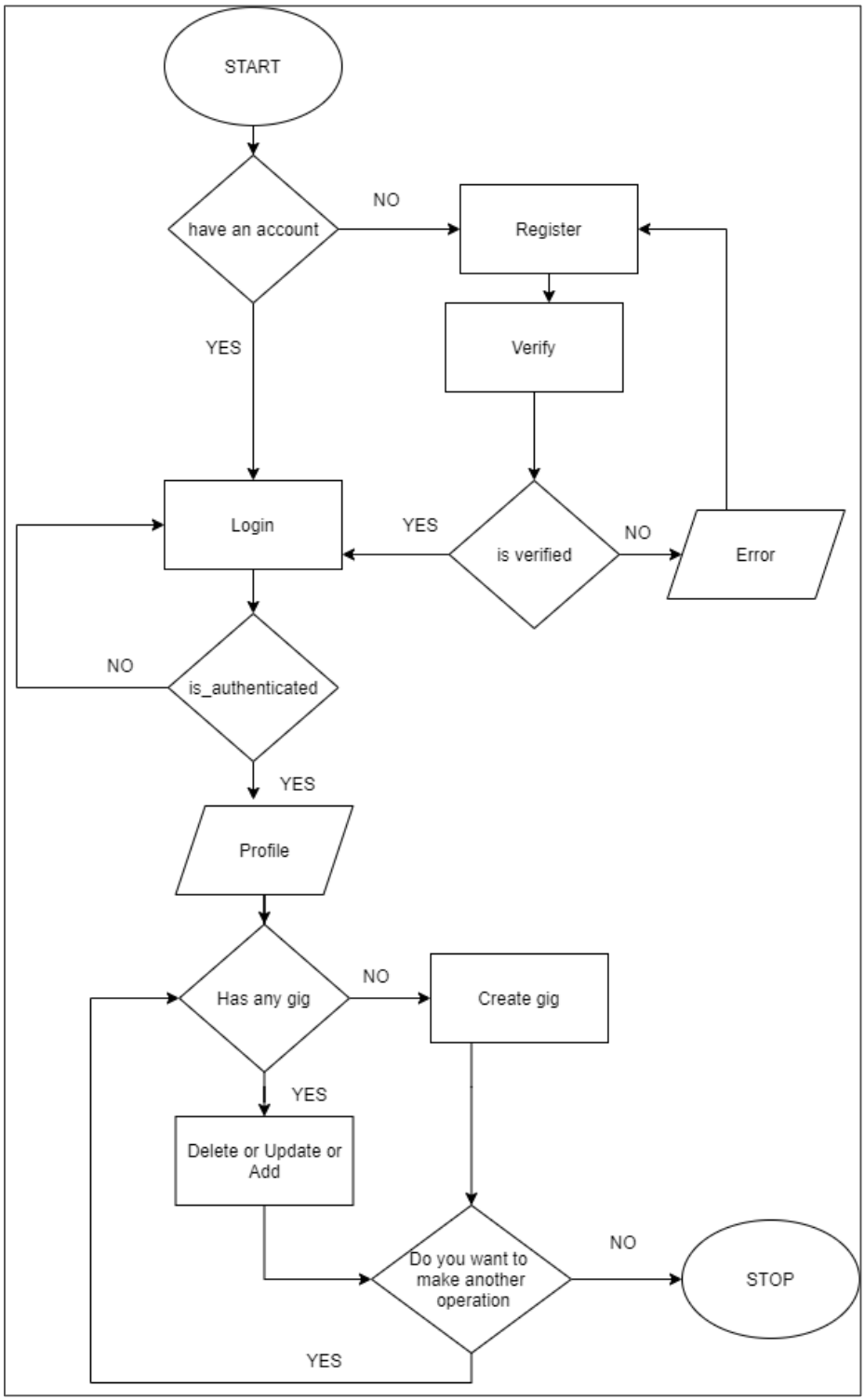


Figure 4: Freelancer's flowchart Diagram

2.3.2 Visitor’s flowchart diagram.

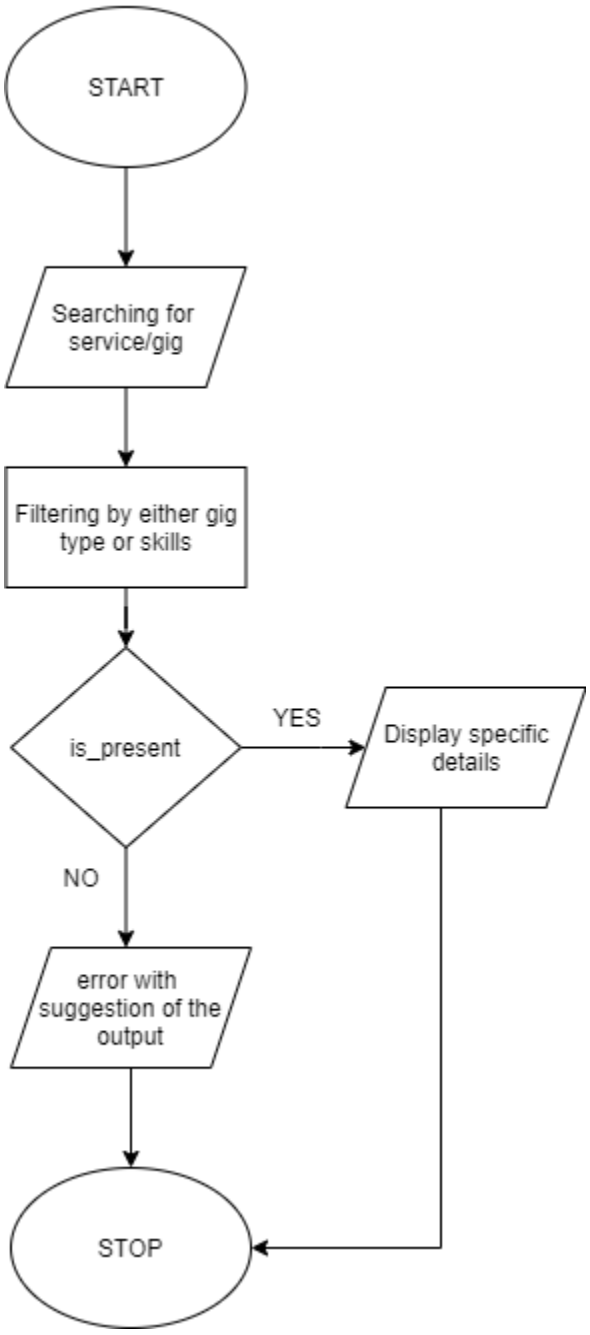


Figure 5: Visitor's flowchart Diagram

2.4 Assumptions and Dependencies:

The system will require the following third-party products/technology

- Backend Technology: Django Framework
- Database: PostgreSQL
- Frontend Technology: HTML/CSS/JS/BootStrap5

2.5 Adopted Methodology

In this project "Online solution for local freelancing service", the methodology for developing this project is the waterfall and spiral model, because these combined methodologies have more advantages and very less disadvantages.

2.5.1 Reasons for choosing the Methodology.

- **Straight-Forward:** This Methodology is very straight forward and easy to understand. By this methodology a person can easily understand what to do.
- **Implementation Phase:** Project can move quickly to the implementation phase because of this adopted methodology
- **Significant and Reliability:** Does work for certain problem domains, notably those where the requirements are well understand in advance and unlikely to changes significantly over the course of development, and where reliability of final product is critical. This assumes you have the resources i.e. Time and People, to do it properly.
- **Reduce Complexity:** This methodology reduces the complexity of the project. At initial state when we start the project and not have any idea about this project then these methodologies allow for a very complex project with incomplete initial understanding of requirement since development is done in small, spiral phases where each phase consists of requirements, risks analysis, and design.
- **Timelines:** Through these capabilities of Methodology that provide the working schedule and inform us the definition of resources, timelines and other project related information, it is easier to complete the project within the given timelines.

Conclusion.

Based on this system to be implemented, a boost in personal employment for people with skills is expected. Fraudsters will also be eliminated via verifications and improve the customer experience and fulfillment to their work/activities.