1. Introduction

1.1 Purpose

The purpose of this document is to present detailed description of the Turk system. It will explain the purpose and features of the system, the interface of the system, what the system will do, the constraints under which it must operate and how the system will react to external stimuli. The document will also cover hardware, software and other technical dependencies.

1.2 Scope

The Turk system will be a bidding market place for business clients and software developers. Business clients will post system requirements and time to complete information - to which developers will bid.

Both clients and developers will have their profile page with relevant information which would be public for everyone to access. The profile pages will also contain their previous work history through the system including ratings on them.

Payment processing is expected to be handled by third party or offline through super user, who will also manage any disagreements over ratings or payments among other things.

1.3 Definitions, Acronyms, and Abbreviations

- **Software Requirements 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."
- **Database** : "Collection of all the information monitored by this system"
- **Use Case Diagram** : A visual representation of relationship between users and their use-interaction with the system
- **ES6** : A commonly used version of standard javascript language
- **HTML5** : A commonly used standard version of HTML(hyper text markup language, used to structure web documents)
- **Session Cookie** : A small set of temporary (until user closes browser) data sent to user's web browser that is commonly used to identify user/session/state

1.4 References

Isatou Sanneh provided sample phase I report.

1.5 Overview

2. Overall Description

2.1 Use-Case Model Survey

Use case diagram follows, use cases will be explained in more detailed in later section.

The types of users are Super User, Client, Developer and visitor.

Turk System

- Search public information — Generates publicly searchable information
- Apply to be a client/developer — <<include>> — Pay deposit money
- Add profile details
- View application status — <<include>> / <<include>> — Login with temporary account
- View grand system statistics

Visitor

<<include>>

View Credential of applicants ◁ Accept or Reject Applicants ◁ Write reason for Rejected Applicants

Verify Transaction (offline)

Super User

Discuss and process developer's payment when client rates delivered system < 3 (offline) ◁ Manage client's low rating on delivered system

Super User

Add money to total deposit — <<include>>

Post a system demand — <<include>> — Login

Client

Hires a bidding developer ◁ Add reason for non-lowest bidder choice

Rate delivered system ◁ Describe rating < 3

Quit from the system — Super user acts on quit demand

Bid on any demand with promised timeline and money

Developer

<<extend>> — Submit Delivered System

<<extend>> — Rate client ◁ Describe rating < 2

<<extend>> — Send protesting message to the super-user — Keep or remove warning

View Account closing status information ◁ <<extend>> — Send protesting message to the super-user
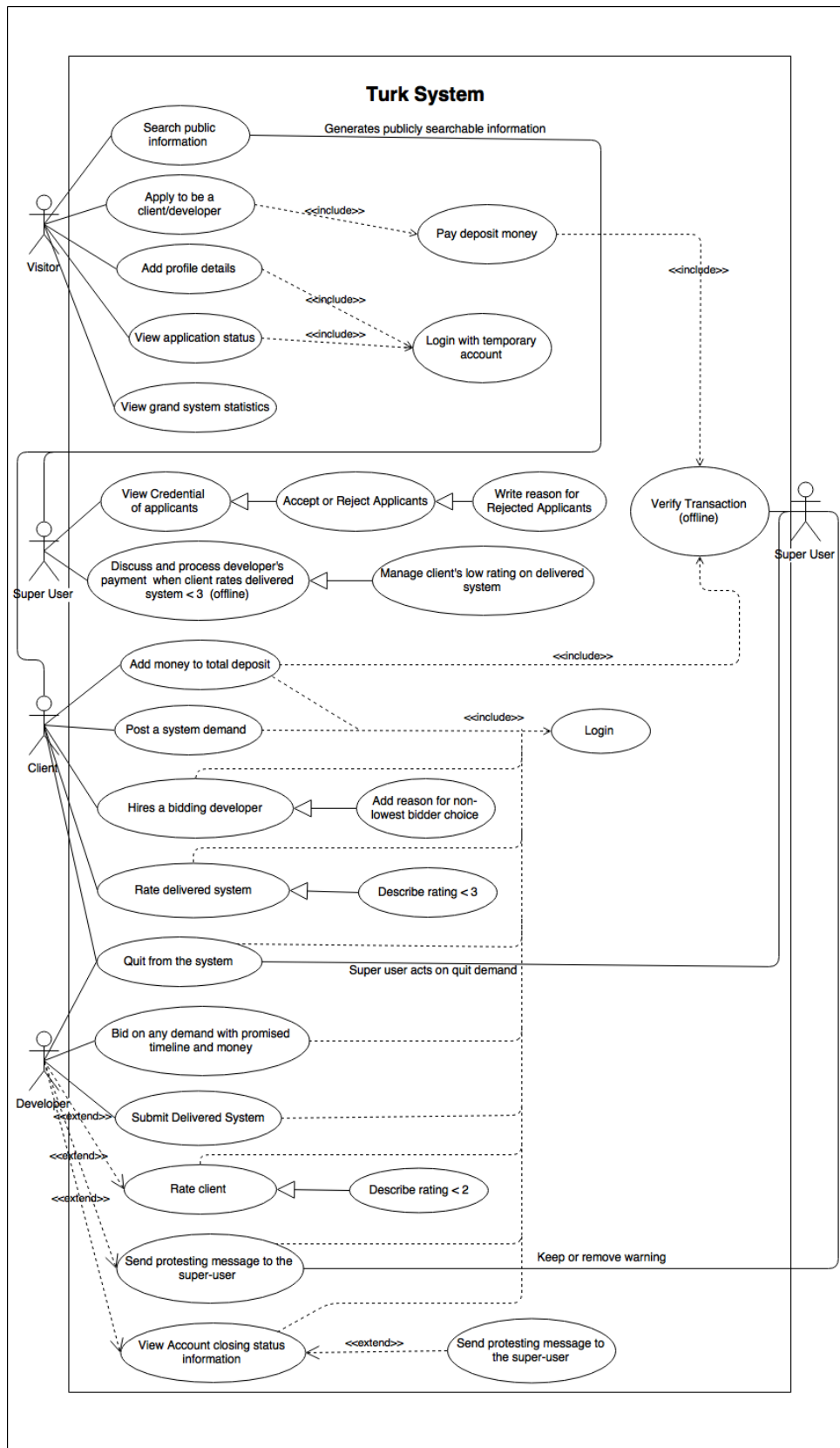
Figure 1:
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A brief summery of the users are:

- Super User: Controls and handles various changes and exception.
- Client: Posts requirements and pays developer
- Developer: Work on client's requirement when chosen
- Visitor: Non-registered user with limited access to view statistics and public information

2.2 Assumptions and Dependencies

All actors must use compatible computer system with standard (unmodified) GUI web browser such as Firefox, Google Chrome etc. with HTML5, ES6 and session cookie support to connect to the system.

3. Specific Requirements

3.1 Use-Case Reports

Use Case: Search public information such as client or developer histories

Brief Description

- Visitor views Client or developer histories such as ratings and project details
- Visitor views grand statistics such as number of clients, developers, client(s) with the most projects and developer(s) making most money, user account information such as resume, picture, interests, sample work/business credentials

Initial Step-By-Step Description

1. Visitor goes to the main page/view of the application
2. Visitor identifies:
    1. Search box
        1. Types and enters search term
        2. User views link to matched User/Project
        3. User follows desired link to view project/user histories and credentials such as resume, interrests, past ratings etc.
    2. Statistics section
        1. View top statistics
        2. Scroll or follow link to view further related information

Use Case: Apply to be a client or a developer

Brief Description

- Provide payment deposit (debit/credit card) information: via third party or offline, must be successful
- Submit basic information such as role, location, username/userID etc. and a desired password
    – System will check to ensure username is unique to it's database

Initial Step-By-Step Description

1. Visitor follow register/login button/link present on most page views including main
2. Visitor submit payment information (email, debit/credit card number, confirmation number, expiration date, zip code)
3. Visitor fills out form containing role, username, password etc. fields
4. User submits the form

- On payment submission error : display reason, abort registration
    - On blacklist error: abort, show reason
- On User information submission error: refund and abort registration, show reason
    - On blacklist error: abort, show reason

Use Case:

Brief Description

Initial Step-By-Step Description

3.2 Supplementary Requirements

4. Supporting Information