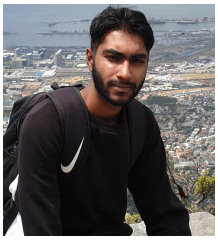
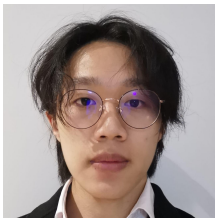
LUNA

Technical Installation Manual

August 1st, 2023

Group Members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Introduction

The primary objective of this ticketing system is to streamline the project management processes, enhance communication, and improve the overall efficiency of the organization. As a company grows it becomes increasingly challenging to manage numerous projects effectively. The proposed ticketing system will serve as a centralized management tool that processes and catalogs customer service requests, tracks project progress and allocates work among the management, technical, and functional teams. The ticketing system will enable seamless collaboration between teams by facilitating the assignment and tracking of tasks, communication through internal notes, and efficient handling of client requirements and project changes. Furthermore, the system will incorporate AI-driven data analytics to optimize ticket assignments, analyze project costs, and identify areas for improvement.

System Composition

- Frontend
- Backend

Our Frontend and Backend are hosted on different servers. Frontend is hosted on localhost:4200 and Backend is hosted on localhost:3000. Since we have also implemented Microservices and made use of the Gateway API to link up all the API Calls, localhost:3001~localhost:3005 will also be in use for the relevant databases.

Technology Requirements

Software, Packages & Services	Version
Browser: Opera / Google / Safari	Latest
NodeJS	> 16 (or long term service)
Node Package Manager	> 16
Angular	> 16
MongoDB	5

Installation

Installing NodeJS and Node Package Manager	
Windows	Guide
Official installer NOTE: select NPM during installation	
Linux - debian	Guide
Through the terminal: • `curl -o- https://raw.githubusercontent.com/nvm-sh/nvm/v0.35.3/install.sh | bash` • `nvm install --lts`	

Installing Angular	
Windows & Linux	Guide
After installing NPM: `npm i -g @angular/cli` NOTE: Windows may require a powershell permission. See the guide above	

Installing MongoDB	
Windows	Guide
Linux - debian	Guide

Cloning Repository

From the terminal:

Clone the repo onto your local machine

```
git clone https://github.com/COS301-SE-2023/ABC-Service-Request-System.git
```

Deployment & Running

Note*: What is described below requires our .env files to be able to run properly. But this is what you would have to do to be able to run the system.

First we should start up the Frontend:

Open the 1st terminal and change it into the Frontend directory:

```
cd frontend
```

This directory is where we run the visual aspects of the website. To Run the Frontend:

```
ng serve
```

Now we should start up the Backend. We are using Microservices and using Gateway API so we need to start up all of these services:

Open 2nd terminal and change it into the Backend directory:

```
cd backend
```

To Run the Backend:

```
npm run dev:start
```

Now you would have to open up a new terminal, cd to the correct directory and start-up the following directories:

```
cd backend/clients
cd backend/groups
cd backend/notifications
cd backend/tickets
cd backend/users
```

Remember to npm start each of these Backend terminals after you have changed it to the following directories.

```
npm run dev:start
```

Once both Frontend, Backend and all it's services have started running, you can open up the browser and search:

```
localhost:4200
```

You have finished the deployment and running phase. Now you can make use of our Ticket Management System on the browser.

Glossary

Frontend:

The visual aspects of the website - the part that users see and interact with

Backend:

Also known as the server side. It consists of the server which provides data on request, the application that channels it, and the database which organizes the information

Microservices:

An architectural and organizational approach to software development where software is composed of small independent services that communicate over well-defined APIs

Gateway API:

A software pattern that sits in front of an application programming interface (API) or group of microservices, to facilitate requests and delivery of data and services

Terminal:

Depending on your Operating System, this will be different - CMD in Windows and Terminal in Linux

User Manual:

https://github.com/COS301-SE-2023/ABC-Service-Request-System/wiki/Manuals#user-manual