CS 6440 Project Final Submission

**Emergency Department Triage – Final Submission**

Term: Fall 2022

Sujil Maharjan

# Section I: Project Overview

**Project Title:** *Emergency Department Triage*

**Team Members and Roles/Responsibilities (If Applicable)**

* *Sujil Maharjan – Full Stack*

**TA Mentor:** *Ronnie Jones*

**External Mentor (If Applicable):** *N/A*

## Project Task Status

|  |  |
| --- | --- |
| **Research and requirement gathering** | **Completed** |
| Research available databases to use | Yes |
| Create mockups for each feature that needs to be developed | Yes |
| Decide on tech platforms based on cost | Yes |
| Refine all the features to develop | Yes |
| **Database Design** |  |
| Create a FHIR DB | Modified implementation |
| Pre-populate the FHIR DB with HAPI FHIR data | Modified implementation |
| Design App specific DB schema | Yes |
| **User Interface** |  |
| Setup VueJS with typescript | Yes |
| Create On Call component of homepage | Yes |
| Create Patient Queue components | Yes |
| Create graph components for homepage | Descoped |
| Create Patient Status component | Yes |
| Create Patient Assessment component | Yes |
| Create Edit capability modals and components | Yes |
| **Server** |  |
| Initiate a NodeJS server with typescript | Yes |
| Create CRUD API for On Call feature | Yes |
| Create CRUD API for Patient Status | Yes |
| Create CRUD API for Patient Assessment | Yes |
| Create CRUD API for ranking patients | Modified Implementation |
| **Deployment** |  |
| Deploy the server | Yes |
| Deploy the UI | Yes |

# Section II – Project Artifacts

**Deployed Application URL:** [*https://ed-triage.herokuapp.com/*](https://ed-triage.herokuapp.com/)

**GitHub Repository Link:** [*https://github.gatech.edu/smaharjan30/ed-triage*](https://github.gatech.edu/smaharjan30/ed-triage)

**GitHub Branch or Commit to Grade (If Applicable):** *main branch. The last commit hash is* ***5e990b1a7781e2a1aca2c1f750eb9ab4edf552b6***

Test Data

For the project the test data is not explicitly generated. Rather, the data source for all the patient information comes from HAPI FHIR Public Test Server (<http://hapi.fhir.org/resource?serverId=home_r4&pretty=false&_summary=&resource=Patient> ). ­The resource used is Patient.

Other than that, the Beds and Staff resources are specific to the app which only stores information for the purpose of triaging. The Staff data sample that is used in the live app can be found in <https://github.gatech.edu/smaharjan30/ed-triage/tree/main/server/seeds> . You can also look at the DB schema of the data in <https://github.gatech.edu/smaharjan30/ed-triage/tree/main/server/models> .

# Section III – Project Presentation

Please see the Canvas Assignment page for the current semester for general guidelines on the presentation.

**Presentation Link:** *(Link to your presentation here, stored somewhere such as Google Drive or YouTube. Ensure your TA mentor can access it. If it requires a password, include it here as well.)*

**Provide a FULL URL, DO NOT EMBED THE LINK IN A WORD OR PHRASE.**

**Note:** Convert Slides to PDF and Merge with this single submission. You could add the contents of this deliverable to the final slide deck and convert the whole thing to a PDF to submit. Just make sure all links are clickable and do not include the submission information in the video presentation. (This is to provide a backup to presentations, both to ensure smoother grading in case of an error in a presentation and to maintain a record in Canvas.)

# Section IV – Project Documentation

* **Technical Documentation**  
  <https://github.gatech.edu/smaharjan30/ed-triage/blob/main/Documentation/README_tech.md>
* **User Manual**
  + The user manual is a PDF since there are a lot of images attached to it. It should be viewable in github as they have the integration for PDF files.
  + <https://github.gatech.edu/smaharjan30/ed-triage/blob/main/Documentation/User%20Manual.pdf>
* **Research**  
  These are the research papers and articles that I referred to while creating this app.
  + eCareers, H. (n.d.). Challenges emergency medicine is facing. healthecareers.com. Retrieved September 18, 2022, from https://www.healthecareers.com/articles/career/challenges- emergency-medicine-is-facing
  + D'Angelo, J. (2020, September 28). Five challenges facing emergency medicine. Five challenges facing emergency medicine | Northwell Health. Retrieved September 18, 2022, from https://www.northwell.edu/news/five-challenges-facing-emergency- medicine
  + FitzGerald G, Jelinek GA, Scott D, et al Emergency department triage revisited Emergency Medicine Journal 2010;27:86-92.
* **Architecture Diagram**  
  <https://github.gatech.edu/smaharjan30/ed-triage/blob/main/Documentation/architecture%20diagram.png>   
    
  Mockup: The original mockup from Sprint #2 is found in <https://www.figma.com/file/AR2H2VWnuA6hC96F1eVHAl/Emergency-Department-Triage?node-id=0%3A1&t=TuY4JOicb9MSrq4c-1>   
    
  Screenshots:   
  <https://github.gatech.edu/smaharjan30/ed-triage/tree/main/Documentation/screenshots>
* **Startup and Configuration Files**   
  There are no startup configurations files for this project. To deploy it to Heroku, it is straight forward. The secrets needed are mentioned in the Technical Documentation. The secret configurations are not commited to GitHub as they are credentials to my database.