Advanced Computer Lab (CSEN 704)

Winter 2024

Virtual Trip Planner

Project Grade: 85%

Report Grade: 10%

Sprint #1 Deadline: Tuesday 22/10/2024 11:59pm

Sprint #2 Deadline: Tuesday 12/11/2024 11:59pm

Sprint #3 Deadline: Tuesday 10/12/2024 11:59pm

Report Deadline: Tuesday 10/12/2024 11:59pm

Please read the following instructions carefully:

- Any case of **cheating**, will result in a zero.

- It is **YOUR responsibility** to ensure that you have:
  - Read and understood everything in the description. This description contains **ALL** the information you need to know about the project.
  - Found a team to work with.
  - Submitted before the deadline.
  - Submitted the correct file(s) on GitHub.
  - Shown your individual contribution on GitHub.

- Good luck!

1 Theme

Introducing our all-in-one travel platform designed to make your vacation planning effortless and exciting! Whether you're dreaming of historic landmarks, relaxing beaches, or family-friendly adventures, our app brings everything together for the perfect trip.

Key Features:

- **Personalized Travel Planning:** Tailor your vacation with preferences like historic sites, beaches, shopping, and budget-friendly options.

- **Seamless Booking:** Book flights, hotels, and transportation directly within the app through trusted third-party services—no redirects, just easy and fast bookings.

- **Smart Budgeting:** Get activity suggestions that fit your remaining budget after booking flights and hotels, with transportation costs included for stress-free planning.

- **Discover Local Gems:** Explore curated activities, museums, and historical landmarks, complete with ticket prices and directions.

- **Real-Time Notifications:** Stay updated on upcoming events and activities you've booked with instant app and email alerts.

- **Tour Guides Itineraries:** Find expert-guided tours or create your own adventure with customizable itineraries and detailed activity breakdowns.

- **Exclusive Gift Shop:** Don't forget to stop by our in-app gift shop for souvenirs and unique local items to remember your trip by!

Whether you're planning your next getaway or looking for hidden treasures on your journey, our app ensures you have everything you need at your fingertips. Start your vacation with us today and experience the world in a whole new way!

2 Team Formation

A form has been provided to be filled by the **scrum master**. The Team name will serve as your **Project's name** so be creative (creative names may get bonus).So make sure the name represents the project's theme.

The form link can be found on the CMS.

3 Overview

This project will follow the Agile Methodology; meaning it will be split into sprints, with each sprint lasting a set amount of time and a fully functioning version of the project

with the specified System Requirements should be submitted and will be evaluated.

The System Requirements along with the sprints they belong to are all outlined in the Excel sheet named <u>Virtual Trip Planner System Requirements</u> under the <u>Virtual Trip Planner Functional Requirements</u> with each requirement labeled with the sprint in which it should be completed. The non- functional requirements are also on the same Excel sheet under the <u>Non-functional Requirements tab</u>. All the grading is also outlined in the Excel sheet for <u>EVERYTHING</u>.

There will be **3 sprints** with the following lengths in duration:

- Sprint #1: 2 weeks

- Sprint #2: 2 weeks

- Sprint #3: 3 weeks

At the end of each sprint, you must provide a fully working version of your software with **ALL** of the system requirements for that sprint.
Note the following:

- You are allowed to work ahead; however, you will not earn extra points for completing any requirements for a later sprint.

- As with the Agile Methodology, you will need to complete any unfulfilled requirements in the next sprint since other requirements will be dependent on the ones that have not been fulfilled.

- In Sprint #1 you will be **penalized for not completing any of its requirements**.

- In Sprint #2 you are allowed to postpone a **maximum of 5 requirements** onto Sprint #3. You will be penalized for more than 5 requirements.

- You are allowed to use your imagination when creating this web application. The only limitation you have is that you **MUST** use the **MERN Stack** (MongoDB, Express JS, React JS and Node JS). You may use more technologies but you may not use less.

4 Objectives

- Learn how to properly use the Agile Methodology to plan out a project and develop the software.

- Learn the process of following a given set of system requirements to develop a software.

- Learn to research and master the use of the MERN Stack.

- Learn how to work together as a team on GitHub.

5 Team Support

Please note the following:

- You should already have your teams ready by now. Remember, there will be no randomization of teams, consequently, those who cannot find enough team members to work with will work **alone** with the full load of the entire project.

- Each team will be assigned a product manager (TA) to refer to for **advice regarding the project and set appointments with during evaluations**.

- All office hours **MUST be requested by EMAIL** to ensure giving each team has a fair amount of time and to ensure the product manager's availability. **Be sure to contact your product manager.**

- Should conflict arise within teams, it is the Scrum Master's responsibility to ensure any and all tasks are divided equally and fairly among team members and that every team member does their work.

- Scrum Masters **cannot and will not be changed mid-semester** so pick your Scrum Masters carefully.

6 Github Repositories

- A repository must be created for each team.

- **Every team member MUST have a contribution on GitHub**. Zero contribution means receiving a zero in the sprint being evaluated.

- All commits made by different team members showing the tasks they worked on the repositories must be clear on Github.

- You may use Github Desktop if you find it easier than using Git commands. In case you prefer the Git commands, a guide with useful Git commands is available on the CMS.

7 Evaluations

- You are free to split your team to work on whichever requirements and in whatever roles (FE vs. BE or full stack).

- In Sprint #1 and Sprint #2, any 2 team members that can ensure the smooth running of system must attend the evaluations and show the requirements on 1 laptop. They do not have to be the same in both sprints.

- In Sprint #3, the entire system will be evaluated on 1 laptop, showcasing your whole project, and **ALL** 7-10 team members **MUST** attend the Sprint #3 evaluation.

- In Sprint #3, any missing team members or teams who do not show up to the evaluations will receive a **ZERO for that entire sprint despite any contribution on Github they may have**.

- The evaluation of your system's UI/ UX will be based on the **subjective opinion of your product manager** so be sure to consult with them on any UI/ UX advice you need.

- A logo that represents the name you chose will be required as a part of the UI/UX grades in sprint 3

- You will not be graded on the UI/ UX until **the evaluations of Sprint #3** but you will need a functional front-end to get evaluated in Sprints #1 and #2.

- Evaluations will be conducted in the week following the submission date and **ONLY ON THAT WEEK**; no exceptions will be made.

- Submission dates are **final** and will be monitored on GitHub for all repositories. You will be required to pull your entire repository at the beginning of the evaluation to ensure only the latest version of your project on GitHub is being evaluated.

8 Deliverables

Each Scrum Master should create a repository for his/her team named after your team names and grant me access to it.

It is the responsibility of the Scrum Master to grant me and the rest of his/her team access to the team's repository.

You must also have/show the following in your repositories:

- DO NOT delete the .gitignore file.

- README.md file. This will be your project report and is worth **10%**. The following link to a README File Template will be useful in guiding you in how to write a proper README file. It also contains the template you **MUST** use. Short or incomplete README files will get a ZERO. Useful online tools you can use to create

a proper README file include but are not limited to readme.so and Dillinger.io. **This report will be submitted with your Sprint #3 requirements**.

- **[OPTIONAL]** A text file containing all the team members who took part in the project as well as the tasks that need to be done and who each task is assigned to should be provided at the beginning of each sprint. You may create 3 separate text files with the assigned tasks for each system for each sprint.

9 Grading Criteria

The grading criteria of the entire project are all outlined in the Excel sheet named **Virtual Trip Planner System Requirements**. Also note the following:

- The Functional Requirements will be graded based on them working well on front-end and back-end and all changes are reflected on the database. This **GIVES YOU FULL CREDIT** for each of the complete requirements.

- Attempting to implement the requirement as code but it does not reflect on the database and/or front-end or not implementing it at all **GIVES YOU NO CREDIT** for the incomplete requirements.

- The Non-functional Requirements are UI (user interface) and UX (user experience), shown under the **Non-functional Requirements** tab in the Excel sheet named **Virtual Trip Planner System Requirements**. Remember that their evaluations will be **purely subjective**.

- Projects with exceptional UI/ UX will receive a **BONUS**. The projects receiving this grade will be chosen **AFTER Sprint 3 evaluations are complete** (NOT DURING).

- Scrum Masters who properly manage their teams will receive a **BONUS AFTER Sprint 3 evaluations are complete** based on the assigned product manager's evaluation of their management and handling of the team.