**CSE6224 SOFTWARE REQUIREMENTS ENINEERING**

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**Tutorial Section: TT3L**

**Group No.: G3**

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# Introduction

## 1.1 Purpose

University often holds events and open days, and neither students nor tourists are familiar with map if they are new to the campus. This creates difficulties campus patrons, whether they are heading to the event location or being blocked by unexpected construction or outage.

Therefore, it is necessary to build a Campus Accessibility Navigation System with Facilities and Event Integration software that satisfy these main needs:

* List of all events happening and will happen on campus
* List of all available route between starting location and destination
* The fastest route between the user’s current location to the desired location avoiding unwanted events (considering events like construction, elevator outages and temporary accommodations for events)
* Campus map navigation for users
* List of accessibility of campus facilities
* List of accessibility of campus events
* Details of events

## 1.2 Scope

The ‘campus accessibility navigation system with facilities and event integration’ software will be name as ‘Campus Route Navigator’ which will display campus route while guiding visitors through navigation system.

**Campus Route Navigator will be able to perform the following functions:**

1. Provide accessible route planning across campus

-Route being shown should automatically avoid unwanted events.

1. Integrate with campus facilities database and events calendar

-Universities able to link their events calendar and database to improve the route calculation system.

1. Store message from users about accessibility information of campus

-User able to contribute message to university database.

-Administrator can double confirm message being send by users.

1. Provide multiple interfaces for users

-Normal user, administrator and disability person can have their own custom interface selected in the software.

1. Present event information on campus navigation

-Events details able to retrieve from university database to show to users.

Campus Route Navigator can eliminate many of the inconveniences associated when visiting a university. **Desire goals include**:

* Make campus navigation easy for everyone
  + Software ensures that every individual move around campus easily and safely
* Help Users make better decisions
  + Give users last updates about accessibility issues so decisions can be plan during navigation
* Let Users share Feedback
  + Allows users to report problem encounter and suggestions to improve the system over time.
* Build an Interactive navigation system
  + Simple and easy to use map where users can go where they wanted in fast and easy way.

**System requirements:**

* Students, Staff, and Visitors (End Users)
  + Primary users of the system, provide real-world feedback, issues and suggest improvements.
* University Events Calendar
  + Supplies information of upcoming events, temporary access changes and additional accessibility setups. Important for real-time event-based rerouting.
* University Facilities Management Database
  + Provides real-time updates on construction, maintenance works, elevator operations and outages. Essential for dynamic route updates to avoid inaccessible areas.
* Campus Maps and Infrastructure Plans
  + Detailed layouts of buildings, entrances, elevators, stairs and ramps that used to build the foundation of the navigation system and design accessible routes.
* University Administration and IT department
  + Manages system integration, user access, data linking , database updates and security.

## 1.3 Product overview

### 1.3.1 Product perspective

### 1.3.2 Product functions

### 1.3.3 User characteristics

### 1.3.4 Limitations

## 1.4 Definitions

Below are terms, phrases and words used in the document and its related definition:

**Table 1.15: Definition**

|  |  |
| --- | --- |
| **Terms** | **Definition** |
| Campus Route Navigator | A digital platform that provides navigation system for campus and provides event infos. |

# 2.References

# 3.Requirements

## 3.1 Functions

## 3.2 Performance requirements

## 3.3 Usability requirements

## 3.4 Interface requirements

## 3.5 Logical database requirements

## 3.6 Design constraints

## 3.7 Software system attributes

## Supporting information

# 4.Verification

## 4.1 Functions

## 4.2 Performance requirements

## 4.3 Usability requirements

## 4.4 Interface requirements

## 4.5 Logical database requirements

## 4.6 Design constraints

## 4.7 Software system attributes

* 1. Supporting information

# 5.Appendices

### 5.1 Assumptions and dependencies

### 5.2 Acronyms and abbreviations