DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING THE UNIVERSITY OF TEXAS AT ARLINGTON

SYSTEM REQUIREMENTS SPECIFICATION CSE 4316: SENIOR DESIGN I SPRING 2021

TEAM NAME VOYAGER

ABHINANDAN YADAV GOVINDA KC MAHESH POUDYAL NABIN SHRESTHA

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REVISION HISTORY

Revision	Date	Author(s)	Description
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0.2	03/21/21	NS	complete draft
0.3	03/22/21	AY, GK, MP, NS	section 1,2,3
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1.0	03/26/21	AY, GK, MP, NS	proof read and finalization

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LIST OF FIGURES

- N/A

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1 PRODUCT CONCEPT

This section describes the purpose and use of our web-page. Our web page will be named after "Voyager". The intention of our web page is to help travelers finding some beautiful lakes and campaign sites in Texas. A user of Voyager will be able to make reservations of cabins, hotels, restaurants located nearby the lakes and share his or her experience and stories to the world.

1.1 PURPOSE AND USE

The main objective of our web-page is to provide updated and accurate information and navigate traveler to find the beautiful lakes and campaign sites located nearby them. The purpose of our website is to help a customer to schedule his trip from beginning to the end by giving detail information regarding his trip and how can he fully excess all the features of our website. A traveler can use our website to manage his trip in economic and planned way.

1.2 Intended Audience

Voyager is created for people of all age groups. Families, Friends, Students, Teachers and any 18+ individual who likes to travel and explore places. The final product of our website will be ready and made available publicly in first phase and after some feedback from customer, it will be made accessible commercially to overall class of customers for the reservations of cabin, restaurant, hotels, renting boat, fishing and campaign sites.

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2 PRODUCT DESCRIPTION

This section provides a description of our website and its primary features and functions. The purpose of the website is to help a user to locate the best and attractive places to go within Texas. The website allows a user to login to the website with a valid username and password. A user can search for the destination site as per their need and availability with the help of our website. A user will have access to latest and most updated information about the traveling places and other recreational activities. There will be a review section on the bottom corner of our website where a traveler can share his or her experience and stories.

2.1 FEATURES & FUNCTIONS

A user will be able to login with their personal information. In order to login to the account user have to input valid information and create a password which all will be safely saved in the database. Once a user logs into the website he or she can search for the hotels, parks and places for entertainment around them within certain range. The product will need internet connection and GPS satellite to locate the real time location of a user.

2.2 EXTERNAL INPUTS & OUTPUTS

Function	Description	Use
User Name	user created id	unique id for login
password	user set password	get access into the website
feedback	the feedback given by the user	rate and comment about the website

2.3 PRODUCT INTERFACES

Our plan is to have two interface:

- 1. **Customer**: in this interface a customer can login into the website by entering valid information and password. A user can search the destination site and deals and discount, add or edit their personal information, upload traveling pictures and videos, review lakes, hotels and restaurant, book hotel and cabin, share their experience and stories, and provide feedback to the developers(our team).
- 2. Administrative or back-end developers: developers have to verify and validate user information, store and update user database, handle file uploads, check security measures, prevent from possible spam and data breach and incorporate ads for commercial use.

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3 CUSTOMER REQUIREMENTS

Here are the customer requirements that our project will fulfill.

3.1 REQUIREMENT NAME

3.1.1 DESCRIPTION

The homepage of our website will cover with the best possible picture of lakes, camping sites, hotels, restaurant and deals and discounts. There will be a separate section where a user can share his or her experience and stories. The web app will include updated and accurate information about the destination site which makes the website user friendly.

3.1.2 SOURCE

The source of the requirement is our sponsor Dr. McMurrough

3.1.3 CONSTRAINTS

- constantly changing customer expectation.
- lack of two way communication between administrative and customer.

3.1.4 STANDARDS

N/A

3.1.5 PRIORITY

The priority of this requirement relative to other specified requirements.

• High (very important to customer acceptance, desirability)

3.2 REQUIREMENT NAME

- Geo location tracking

3.2.1 DESCRIPTION

- The website tracks the geo-location of lakes, camping sites, hotels, restaurant which are near the current user's location.

3.2.2 SOURCE

The source of requirement is our sponsor Dr. McMurrough.

3.2.3 Constraints

- consent from user - limited range of services at distant places.

3.2.4 STANDARDS

N/A

3.2.5 PRIORITY

High

4 PACKAGING REQUIREMENTS

We will not be delivering any products because there is no hardware component involved in our project. The software requirements for this operation will be made available online as a web page.

4.1 REQUIREMENT NAME

-web page

4.1.1 DESCRIPTION

A web page will be made available to carry out administrative work and maintain database of a user.

4.1.2 SOURCE

N/A

4.1.3 CONSTRAINTS

- time complexity
- programming error
- possibility of data leakage and server downtime.

4.1.4 STANDARDS

N/A

4.1.5 PRIORITY

Medium

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5 PERFORMANCE REQUIREMENTS

5.1 REQUIREMENT NAME

- To be decided (TBD)

5.1.1 DESCRIPTION

Performance of our website depends on number of user, screen time and feedback from the customer.

5.1.2 SOURCE

N/A

5.1.3 CONSTRAINTS

- slow internet
- bad server and hosting
- poor coding standard
- too many widgets and plugins

5.1.4 STANDARDS

N/A

5.1.5 PRIORITY

High

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6 SAFETY REQUIREMENTS

6.1 REQUIREMENT NAME

-To be decided (TBD)

6.1.1 DESCRIPTION

Safety requirements addresses on having secure internet connection, guide a user to choose strong password and protect a user from possible data breach against hackers.

6.1.2 SOURCE

N/A

6.1.3 CONSTRAINTS

- user fall for scams
- possibility of data breach
- threats on privacy

6.1.4 STANDARDS

N/A

6.1.5 PRIORITY

High

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7 MAINTENANCE & SUPPORT REQUIREMENTS

This section addresses features specific on maintenance and support by updating website software, improving website speed, fixing HTML Errors, backing up files and search Engine optimization, ensuring consistency across all pages, fixing broken links, and reviewing website analysis.

7.1 REQUIREMENT NAME

- To be decide (TBD)

7.1.1 DESCRIPTION

Our team will provide maintenance and support to the application, fix bugs, and solve other technical issues that may arise during the development and testing phase.

7.1.2 SOURCE

- web app testing
- feedback from a user

7.1.3 CONSTRAINTS

- website may crash during the update.
- possibility of data breach.

7.1.4 STANDARDS

N/A

7.1.5 PRIORITY

High

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8 OTHER REQUIREMENTS

8.1 REQUIREMENT NAME

- to be decide (TBD)

8.1.1 DESCRIPTION

Our team will host the website from Amazon Web Service (AWS) or other cloud service provider.

8.1.2 SOURCE

N/A

8.1.3 CONSTRAINTS

- possibility of data breach.
- fee for service.
- slow responding time from the server.

8.1.4 STANDARDS

N/A

8.1.5 PRIORITY

Moderate

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9 FUTURE ITEMS

9.1 REQUIREMENT NAME

- to be decided (TBD)

9.1.1 DESCRIPTION

During the completion of project we might face some difficulties to gather correct information about the lakes and camping sites, inaccurate budget estimation, rental and booking problems or even bugs in code which may delay the project.

9.1.2 SOURCE

N/A

9.1.3 CONSTRAINTS

- -limited time and resources
- lack of experience and skill set

9.1.4 STANDARDS

N/A

9.1.5 PRIORITY

Moderate

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REFERENCES

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