{Purpose }

The purpose of the document is to address the requirements behind building the targeted software; In this case, a web application which acts as a hub for campgrounds around the world and lets users review, acquire information about campgrounds and interact with each other.

{Intended Audience}

The document is intended for software developers, project manager and the client.

{Product Scope}

This Campsite Web Application has been built to easily find the campsites in Bangladesh. It will give a platform to the campers and all other users to find a better place easily. Users have the scope to create their experiences and share it so that all other users can find a suitable campsite with every details like locations and experiences. The application can be accessed through a web browser from any device – a computer or mobile.

Users can create profile with a minimum requirements for being a camper and share their experiences and explore others. And the administration will control and manage every data of the web app and all other users.

The application needs an Internet and GPS connection for accessing the app and also find the location on map. Thus users can find the location as well as all the details about campsites including costs.

Campers can find other campers there and meet new people. Campers also can review and rate the camps so that people can get a clear view.

{Risk Definition}

This web app is going to be a better platform for so many campers in Bangladesh who love camping. But there are always risks to build this kind of app where so many features are being used. Technical issues can be faced. As a team project, there can be faced backend development issues while making a certain standard for working.

{Intended Use}

To developers, the Software Requirements Specification provides concise insight into what exactly is expected as an end-product. For project manager and client, this document provides mutual agreement and understanding as to what the product should comprise.

{User Classes and Characteristics}

Primary User: General public

\\ Secondary User: Admin

{User Needs}

Primary User Needs: The Campsite Web App will allow primary users to discover campsites in Bangladesh. Most campers or adventurers in the country struggle to find an ideal camping site, as this requires subscribing to various social media pages and surfing through different opinions in order to find an ideal campsite. Campers need to get acquainted with other campers with similar interest. The camping web application provides a platform for camping-interested people who can acquire all the necessary information about a camp, discover campers with similar interests, and introduce sites of their own. \\ \\ Secondary User Needs: In case of an error or handling of anomalies, Admins need to check the error from a primary user's perspective, and need to be able to have write properties over any posts.

\section{Functional Requirements}

3.1.1 **Feature: Create Account**

User story:

As a user, I need to create a user account, so that I can review, add/delete/edit or post campgrounds.

* A user must add email, password and a username to create an account.
* A user cannot create multiple accounts under the same email or username.
* Password should have a minimum length of six characters.
* Optional fields are first name, last name and avatar url.

Confirmation:

* From “Campgrounds” page, click on ‘Sign up’.
* A Sign Up form will appear.
* Fill in the necessary fields.
  + Omitting any required fields and clicking on “Submit” will invoke “Field required” messages under required field(s).
  + Entering an invalid email and clicking “Submit” will notify the user to type in a valid email through a similar form of message.
  + Avatar URL can be left empty.
* Click on “Submit”
* System redirects to “Campgrounds” page with flash message “Welcome to BonFyr, User”.
  + Any network or unidentified error will redirect the user to the sign up form with the flash message “An unexpected error occurred. Please try again”.
  + Once registered, link to the camper’s profile will appear on the right side of the top navigation bar in the form of the camper’s username.

**Feature: Follow Camper**

User story:

As a user, I need to follow another camper(s) so that I can get notified when the camper posts another campground.

* Only a registered user can follow another camper.
* A camper can only be followed if the camper is registered.
* Whenever a camper the user follows adds a new camp, the user will get an in app notification.
* The option to follow will only appear in the followed camper’s profile.

Confirmation:

* Navigate to a Campground page.
* Click on the author’s profile link under “Submitted by”
* Author’s profile page opens.
* Click on “Follow Camper”.
  + If the user(follower) is not registered, this will lead to the Sign In form with the flash message “You can follow a camper only if you are signed in.”
  + If there is a network or unidentified error, the system redirects to the same page with the flash message “An unexpected error occurred. Try again”. Option to follow still available.
* “Follow” button turns to “Following” and flash message saying “You are now following *User*”.
* User will receive a new notification if followed camper posts a new campground.

\subsection{Feature: View Camp Demographic and Weather Information}

As a user, I need to visit a camp's page and view its price, location, description and weather information, so that I can decide if the camp would be an ideal choice for me.

\begin{itemize}

\item Demographic Information includes a camp's pictures, description, price, location and its author's profile link.

\item Weather condition includes temperature, wind speed and climate of the camp.

\item Temperature should be in degree Celsius, and wind speed in "km/hr"

\item Price should be in BDT format

\item A user does not need to be signed in to view information about camps

\end{itemize}

\textbf{Confirmation}

\begin{enumerate}

\item From Home page, click on "View Our Campgrounds".

\item System redirects to "Campgrounds" page.

\item From "Campgrounds" page, click on a camp's link to go to its page.

\begin{enumerate}

\item Click on "More Info" in any of the showcased campgrounds to see if it leads to the page of the camp.

\item Search for a camp and then click on "More Info" in of the resulted campgrounds to see if it redirects to the page of the camp.

\item As a logged in user, if you have added campgrounds of your own, navigate to your profile and click on any of the campgrounds listed under "My Campgrounds" to see if it leads to the camp's page.

\end{enumerate}

\item User can see weather conditions, description, price and location in the camp's page.

\begin{enumerate}

\item From the camp's page, click on the author's profile link.

\item Click on one of the campground's link under "Author's Campgrounds" to see if it leads to the camp's page.

\end{enumerate}

\end{enumerate}

\subsection{Feature: Sending Email to a Camper}

\textbf{As a} camper, \\ \textbf{I need to} send email to another camper \\ \textbf{so that} I can arrange a booking or gain more information about desired camp.

\begin{itemize}

\item Only registered users can send mails to campers.

\item Option to send mail will only be available in a recipient camper's profile.

\end{itemize}

\subsubsection{Confirmation}

\begin{itemize}

\item \textbf{Prerequisite:} User must be logged in.

\begin{itemize}

\item If user is not logged in, step 4 mentioned in confirmation should redirect the user to the login page with the flash message "You need to be logged in to send mail to a camper.".

\end{itemize}

\end{itemize}

\begin{enumerate}

\item Navigate to a Campground page.

\item Click on the author's profile link next to "Submitted by".

\item System redirects to author's profile page.

\item Click on "Mail Camper" link/button.

\item "Send Mail" page opens with a form for submitting mail.

\begin{itemize}

\item The form contains a text field and a "Send" button.

\end{itemize}

\item Fill up the text field and click on "Send".

\begin{itemize}

\item Clicking the "Send" button without filling up the form should notify the user to fill up the text area.

\end{itemize}

\item System redirects to author's profile with flash message "Mail sent successfully."

\begin{itemize}

\item Any network or unidentified error should redirect the user to author's profile page with flash message "There was a problem sending the mail. Please try again."

\end{itemize}

\end{enumerate}

3.1.3 Feature: Create, Edit and Delete Camp page:

* User story:

As a camper,

I need to create, edit and delete camp page,

so that I can share and update information about a campsite and other users can easily get those information.

* + The camp page will have a camp picture, all the information about the campsite with location, pricing details, review/rating and authors name.
  + The camp page must have editing option for updating the latest information.
  + There will be a delete option in case the camp is no longer available.
  + Other users can comment on the camp pages.

Confirmation:

* For creating a camp page, user must click on ‘Create Camp’.
* There will appear a post option where user will select a location for camping campsite, select a picture, pricing details and give other information. Then create it by clicking ‘Post’.
* To update it, user need to click on ‘Edit Camp’ and all other details will be arrived.
* To delete the page, user need to select the ‘Delete Camp’ option.

3.1.4 Feature: Search Campsites

* User Story:

As a camper,

I need to search camp pages and campsites,

I can easily find camp pages and user profiles.

* + The search bar will allow the user to search by location, camp page name or user profile name.
  + Also user need to search a proper location on google map.

Confirmation:

* There will be a functional search bar.
* To search, user need to write a proper location or name in the search bar and click ‘Search’.
* After searching a location in a camp page, there will be a map option which will redirect the user to the google map.