CSN-254

CHANNEL-6 SRS DOCUMENT

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 - Functional Requirements
 - Use case diagram & description

SaS News

Requirement and Specification Document 21-03-2022

Version Major

1. Project Abstract:

Our project is to develop a mobile application for the people who look out for news every second and make the sharing and saving of articles easy at your fingertips. SaS news also comes with functionalities like text-to-speech, making friends through the web which makes them feel like a social media platform.

2.Document Revision History:

Rev. 1.0 21-03-2022 - initial version

3.Customer:

SaS news is a market-driven software which is developed for an open market i.e., to be launched in the product market .The end-customers of this software are the people who enjoy reading news every day and love sharing the articles they like with friends at the click of a button. Our software also targets the students and working individuals preparing for government competitive examinations which heavily involves current affairs and saving the important articles will be very handy for them during the last-minute revision.

4. Competitive Landscape

There are so many different kinds of news apps available in the market. Prevailing apps in the market provide various features but there are so many limitations in the features provided.

Other projects Pros:

In the market there are news apps that provide features such as

- Live news
- Breaking news
- News videos users can watch the news videos whenever they are free instead of Watching live news.
- Latest news updates according to the personalised choice.

Other project cons:

- There are only a few applications that allow sharing the news to other people, but these apps also allow sharing the news articles through different platforms. It cannot be done through the same application.
- In some applications users are not able to view the news of their desired category.
- Some applications also face problems like the saved articles are not visible later to the users.

Our project pros:

Our system is a mobile application that provides some common features such as users can watch live news, breaking news. Additional features that make our application stand out in the market are

- Users can make friends in this app and can share the news among their friends through the same application.
- Users can also save the news articles which are visible to them through a separate column.
- The different news categories are available to users in the home page of the application so that they only watch the news of the desired category.
- Application also provides text to speech features where the news article can be turned into audible form when desired by users.

5. System Requirements

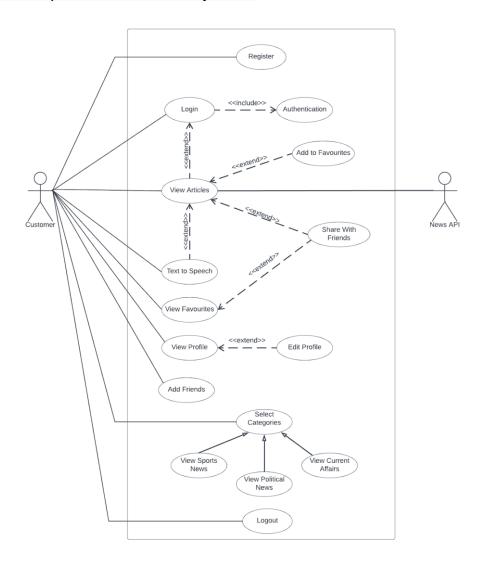
a) Functional requirements:

The system should be able to provide an option through which the user will be able to select the category of the news he wants to view. There should also be an option for converting the news from text to audio form. The system should also provide a facility to add the friends using their ID.

There should be an option(Add to favourites) for saving the articles which the user finds interesting so that the user will be able to visit the saved articles later. And also, there should be an option for sharing the articles with the friends of the user(within the application).

Use Case Diagram

The following use case diagram can be used to understand the functional requirements of the system:



The use cases are explained as below:

Register: This use case will allow users to create accounts and help them to keep track of their activity using their account.

Login: After the user got registered the user needs to login every time, he wishes to access our application.

View Articles: After the user logins to the application, he can view the articles that are trending or say live updated news.

Add to favourites: This is the use case which extends the view article in which the user will be able to save the articles to his favourites, which he likes.

Text to speech: This is the use case which extends the view article in which the user can convert the news in the article from text to the audio form.

View favourites: In this use case user can view the articles which he added to the favourites.

Share with friends: This is the use case which extends the view article and view favourites in which the user will be able to share the article to his friends within the application.

View Profile: In this use case the user can view his profile.

Edit Profile: This is the use case which extends the view profile use case in which he can modify his personal details.

Add Friends: In this use case users can add friends using their user ID.

Select Categories: In this use case the user can select the categories which he likes to read like sports, politics, current affairs, etc.

Logout: Using this use case user can logout of the application.

b) Non-functional requirements:

Timing Constraints:

The project is expected to be completed in 4-5 weeks. As we are using an iterative waterfall approach, which is an iterative model, where we will be delivering the model once for beta testing in 4 weeks. Then everything is analysed, integrated, and deployed.

Security and privacy issues:

The data provided by a user while creating an account with the application will be stored in the mongo DB database. MongoDB offers network encryption and can pass through disk encryption which helps us to protect databases and communications.

Patent rights are taken to make sure that our application code is not copied. Nodejs Framework is being used which does not allow any kind of access to code files to users other than admin.

Performance requirements:

One of the most important requirements to be achieved is that Fresh news should be updated immediately when the page is refreshed. The response time and errors of the text to speech action should be minimised.

Software Quality Attributes:

The system is user friendly.

The system is efficient and beneficial.

Users will be provided with a brief description of the features of the application.

As the system is a mobile application there is a need for installation of the application on their device.

c) Customer User Interface Requirements:

User interface is the front-end application view through which the user interacts to use the system. The graphical user interface helps the user to interact with the application via use of different icons such as buttons, navigation icons, etc:-

Customer Prerequisites:

- Android Mobile: Any mobile which supports android application is sufficient to use our mobile application
- Internet Access

d) Development Tools Requirements:

- Front-end development Tools: Front end is developed using React Native Which can be done by a text editor such as VScode and JavaScript libraries.
- Back-end development tools: We want to use Nodejs for backend development and Mongo dB for database management.
- Some Native Android Modules: We need some native modules for text to speech conversion.

Requirements that must be included:

- Register and Login.
- View Articles.
- Select categories.
- Add to favourites.
- View favourites.
- Add friends.
- Share with friends.
- View Profile.
- Edit Profile.
- Logout