Assignment 1: Research, Plan, Design Document

GRIFFITH COLLEGE DUBLIN

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Course:	**WT**			**Stage/year:**	**3**	
Subject:	**Web Technology**					
Study Mode:	Full time	☑		*Full-time*		
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Assignment Title:	**Assignment 1: Design Document**					
Date due:	**07/03/2025**					
Date submitted:						

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Signed: ____Saugat

Abhishek

Harshiv_____ Date: _____07/03/2025_____

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TITLE

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1 Introduction

1.1 Description of the project and purpose of document (1-2 paragraphs)

In an era where information is abundant and scattered across multiple sources, staying updated with the latest news can be challenging. Our project aims to develop a **News Aggregator** which is named UpToDate—a responsive web application that merges news from various reliable APIs, covering topics such as Sports, Technology, Weather, and more. This platform will allow users to conveniently access real-time news updates in one centralized location while also providing features like user authentication and personalized bookmarking.

One of the primary objectives of this project is to simplify news consumption by aggregating relevant and up-to-date information in a structured manner. Users will be able to filter news based on categories, search for specific topics, and save articles for later reading. The system will leverage **AngularJS** for a dynamic front-end experience, **Node.js** for backend services, and **MongoDB** for secure data storage. Additionally, this document serves as a comprehensive proposal for the development of our News Aggregator application, outlining the system's core functionalities, user requirements, research findings, and design specifications. Furthermore, it includes the project timeline, ensuring a structured and efficient development process while allowing room for iterative improvements and future enhancements.

2 Functionality

2.1 Functional Requirements

The following are the key functional requirements of our News Aggregator system:

- **User Authentication**: Users can register, log in, and manage their accounts.
- **News Aggregation**: The system fetches news from multiple APIs and categorizes them based on topics such as Sports, Tech, and Weather.
- **Bookmarking**: Users can save news articles to their bookmarks for future reference.
- **Search and Filtering**: Users can search for specific news and filter results based on categories.
- **Responsive Design**: The application adapts to different screen sizes, providing a seamless experience on both desktop and mobile devices.
- **Backend Management**: The system processes API requests, handles user authentication, and stores user data securely in the database MongoDB.

3 Research

3.1 User Analysis

Understanding the target audience is essential for delivering a user-friendly experience. Our primary users include:

- **General News Readers**: Individuals who seek a centralized platform for daily news updates.
- **Tech Enthusiasts**: Users interested in staying updated with the latest advancements in technology.
- **Sports Fans**: People looking for live scores, match highlights, and sports-related news.
- **Weather-Conscious Users**: Users who want real-time weather updates for their location.

3.2 Persona's

- **Persona 1: Alex (Tech Enthusiast)**
  - Age: 25
  - Interests: Tech news, startups, and gadgets
  - Needs: A reliable source for tech news with bookmarking capabilities
- **Persona 2: Sarah (Sports Fanatic)**
  - Age: 30
  - Interests: Football, cricket, and live match updates
  - Needs: A platform with real-time sports news and match highlights

3.3 Competitive Analysis

We analyzed similar platforms such as **Google News and Feedly** to understand their strengths and weaknesses. Our platform differentiates itself by offering personalized bookmarks and an intuitive UI designed for responsiveness.

Additionally, we studied news websites such as **BBC, Irish Times, and Time Magazine** to gain insights into content presentation, user engagement strategies, and UI/UX design principles. These platforms excel in delivering high-quality journalism and structured content but often require users to navigate through multiple sections to access specific news. Our News Aggregator aims to bridge this gap by offering a **free, centralized, and intuitive news consumption experience** with a focus on real-time updates and responsive design.

3.4 Content Inventory

The content for the News Aggregator includes:

- Real-time news articles fetched via APIs
- Categories like Sports, Tech, Weather, and General News
- User-generated data (Bookmarks, Preferences)
- Authentication and Profile Management Data

4 Design specifications

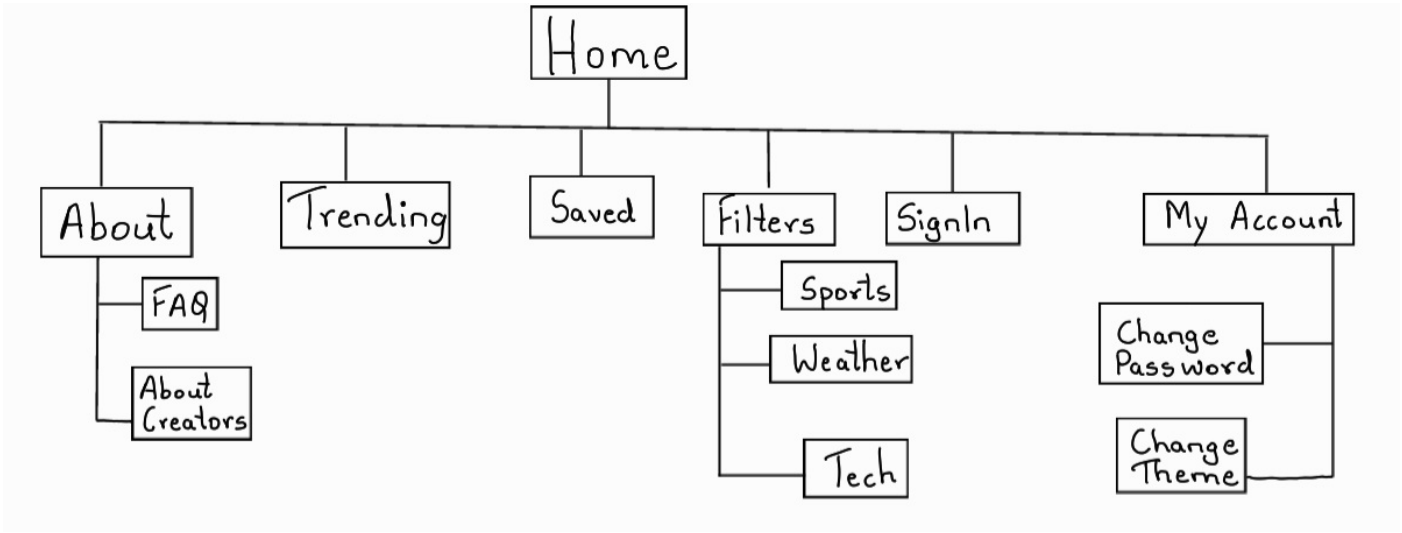
4.1 Site map

The site map includes:

- **Home Page**: Displays top news from different categories.
- **Login/Signup Page**: Allows users to authenticate.
- **News Category Pages**: Filters news based on categories (Sports, Tech, Weather, etc.).
- **Bookmark Page**: Shows saved articles.

- **My Account page**: Allows users to manage preferences.
- **About page**: Contains the info of the creators.

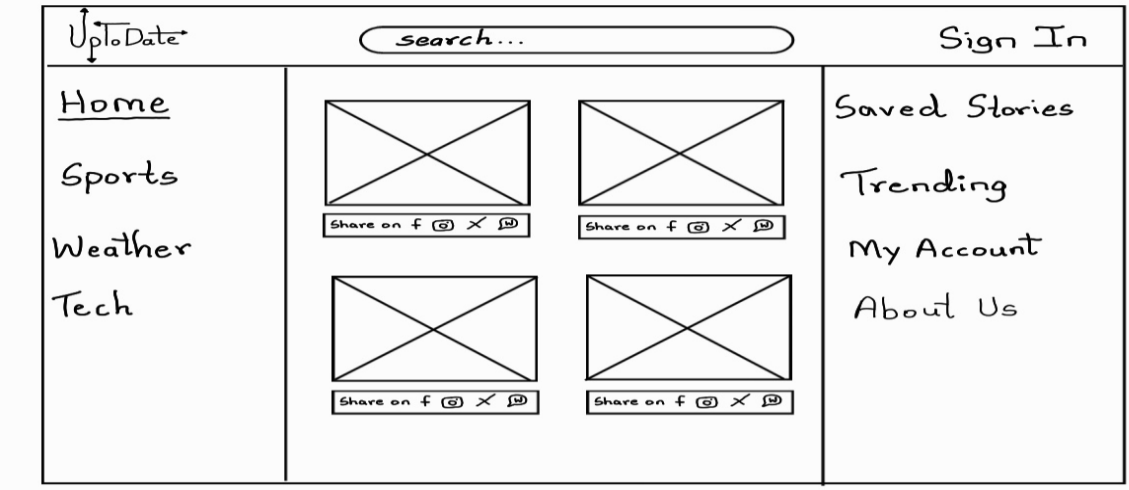
The site map containing the above functionality is shown below:



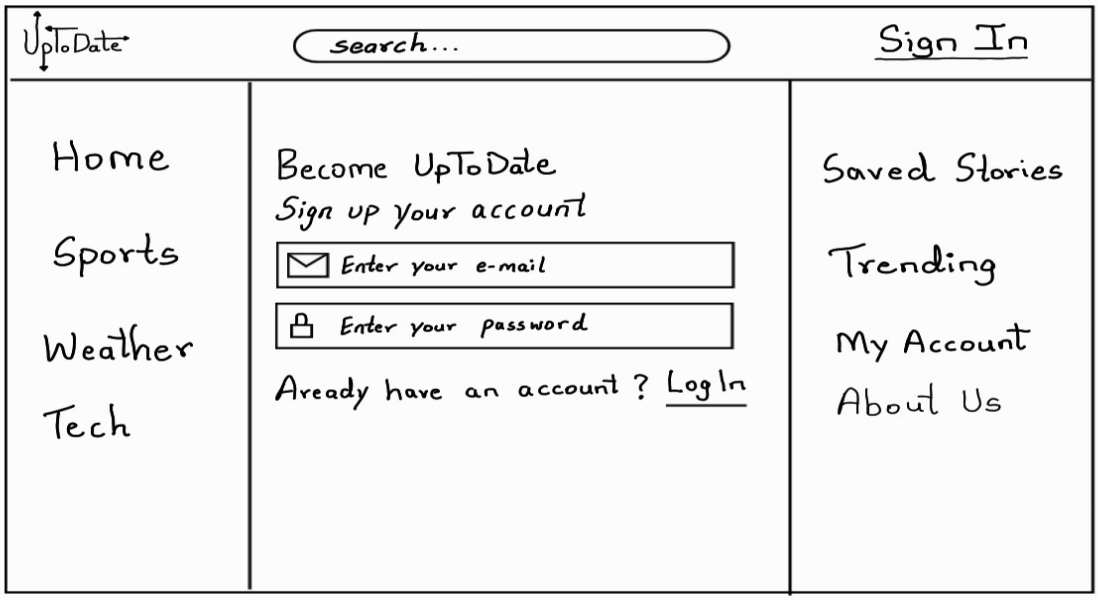
4.2 Wireframe templates

The wireframe of the website 'UpToDate' in Desktop and Mobile is shown below:

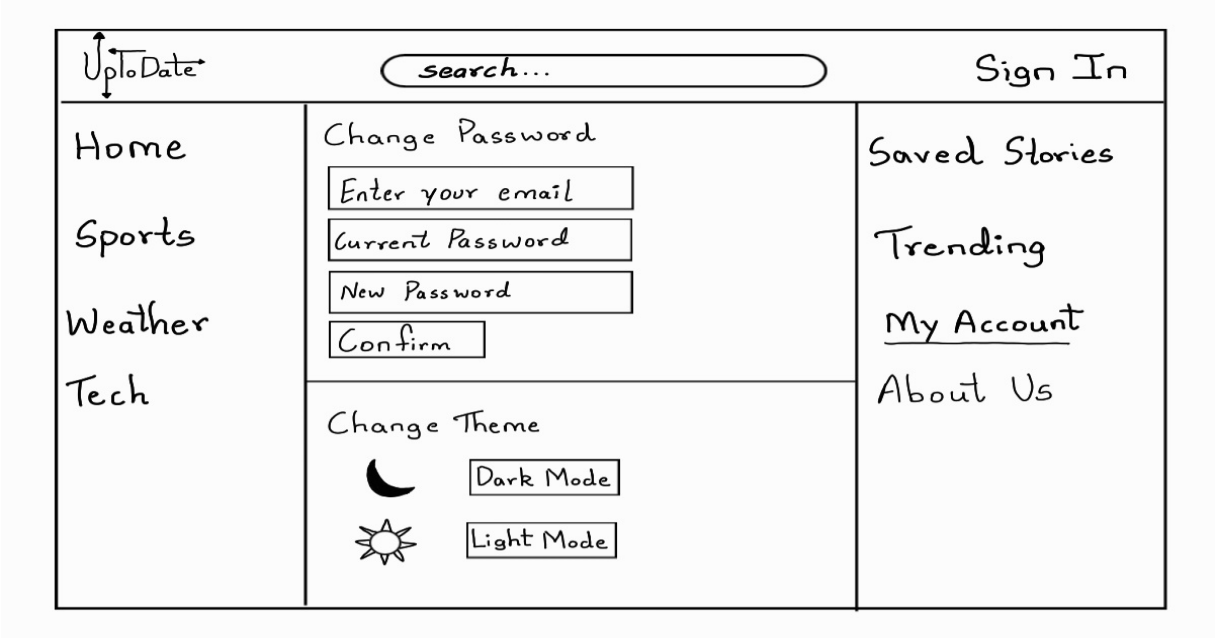
- Desktop
  - Home_D



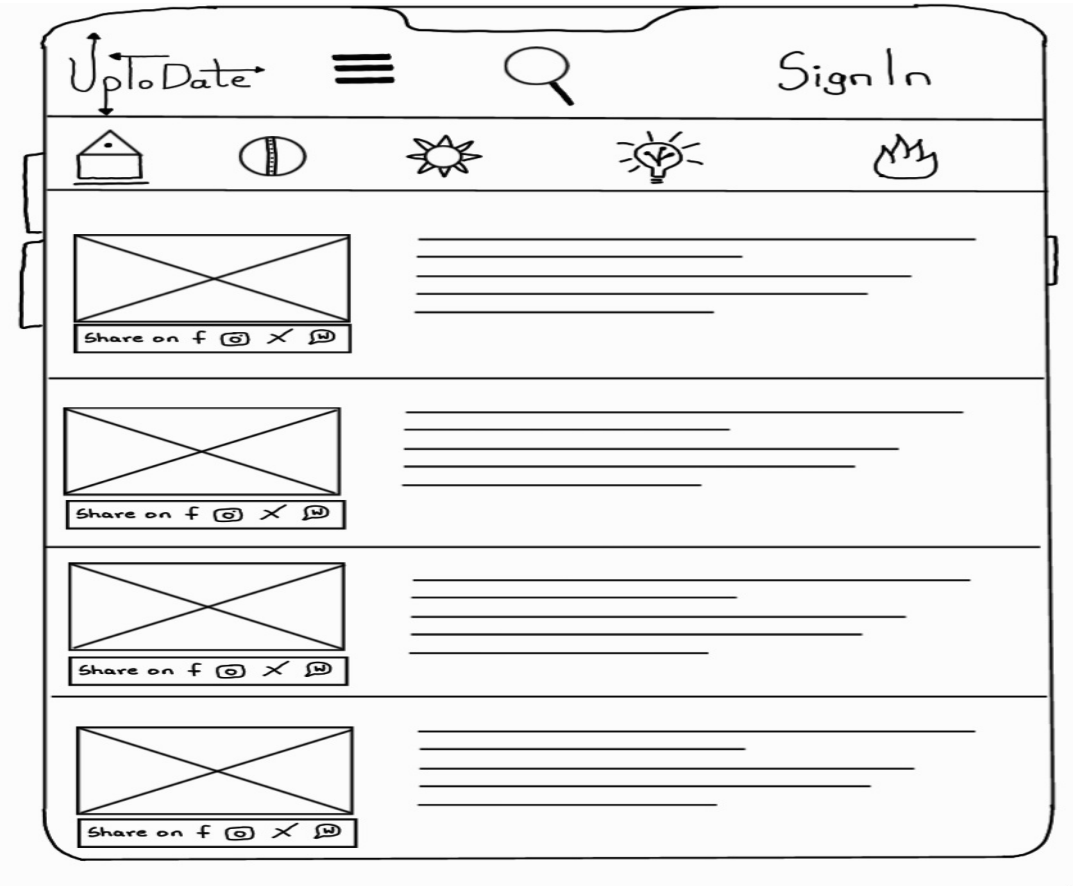
- SignIn_D:



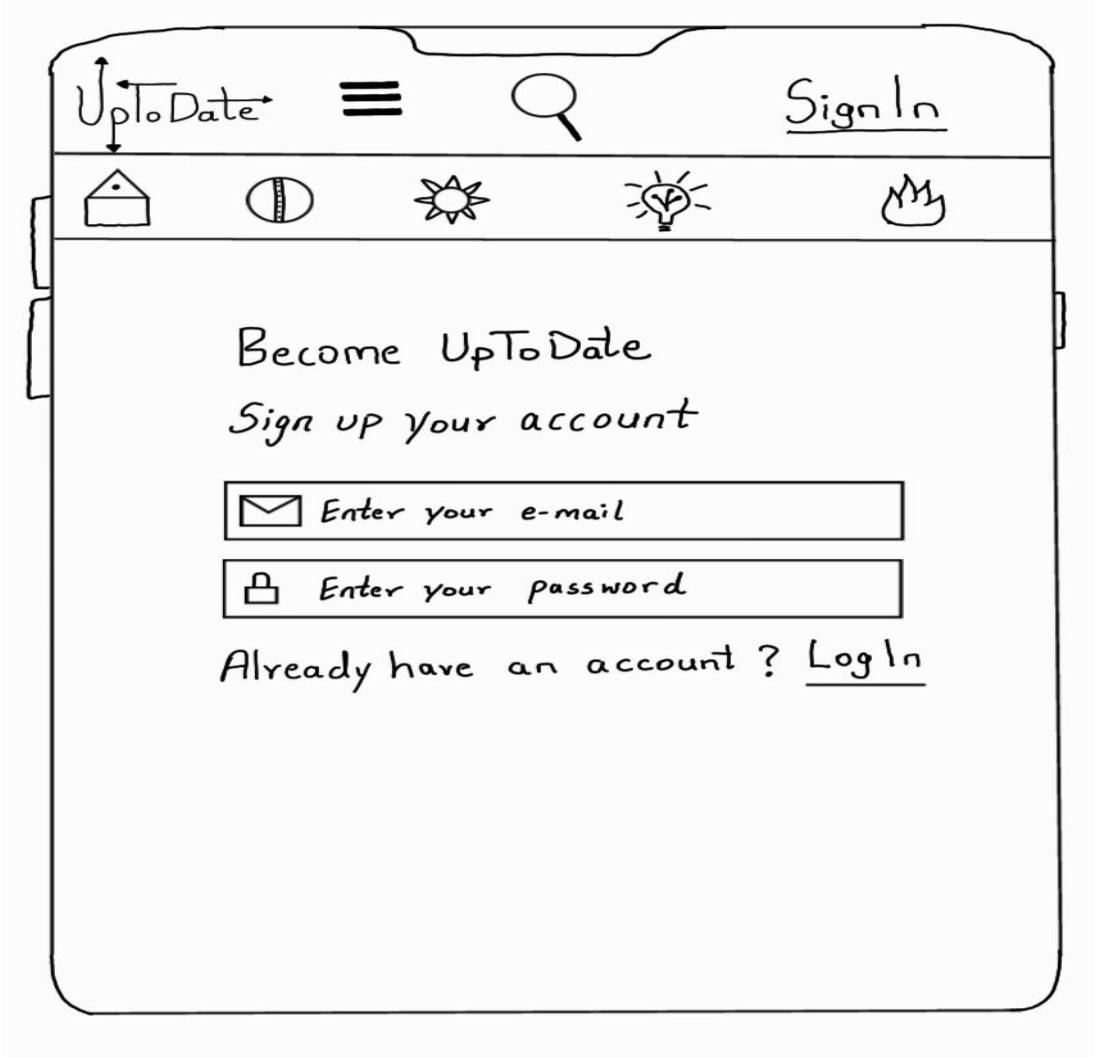
- MyAccount_D:



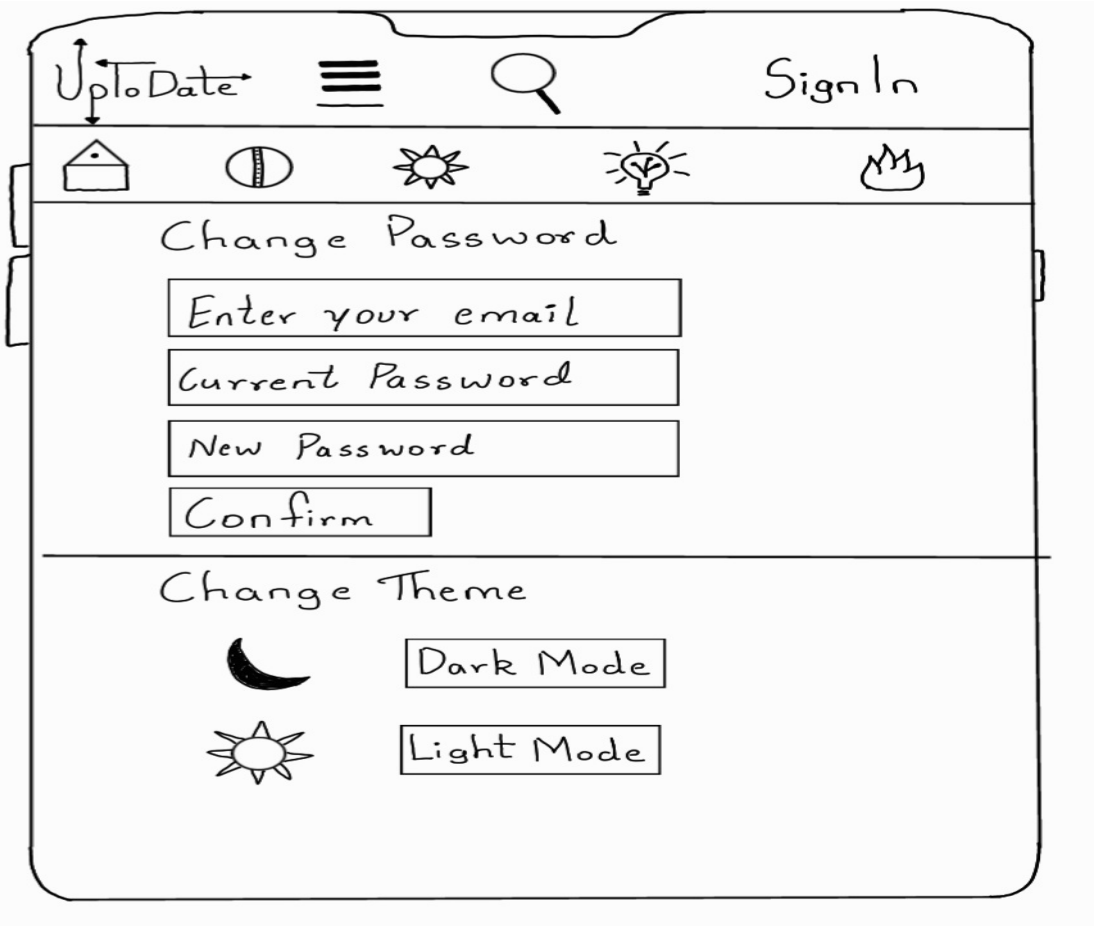
- Mobile Wireframe:
  - Home_M:



- SignIn_M:


UpToDate
Sign In
Become UpToDate
Sign up your account
Enter your e-mail
Enter your password
Already have an account ? Log In

- MyAccount_M:



4.3 Colour

The color scheme will be modern and minimalistic with a focus on readability:

- **Primary Color**: Blue (#007BFF) – Represents trust and reliability
- **Secondary Color**: White (#FFFFFF) – Clean and readable background
- **Accent Color**: Grey (#F4F4F4) – Used for UI elements and separators

4.4 Fonts

We will use the following fonts:

- **Primary Font**: Roboto (for headings and content)
- **Secondary Font**: Open Sans (for descriptions and smaller text)

5 The project timeline/Schedule

The development of the project is divided into the following phases:

- **Week 1**: Research and Requirement Gathering
- **Week 2**: UI/UX Design and Wireframing
- **Week 3-5**: Backend Development with Node.js and MongoDB
- **Week 6-9**: Frontend Development with AngularJS
- **Week 10-11**: API Integration and Feature Implementation
- **Week 12**: Testing and Deployment