

UIDESIGNS

NEWS SUMMARIZER API

Submitted To,

Satheesh Kumar S

Assistant Professor

PG Department Of Computer Applications

Submitted By,

Shyam Siby

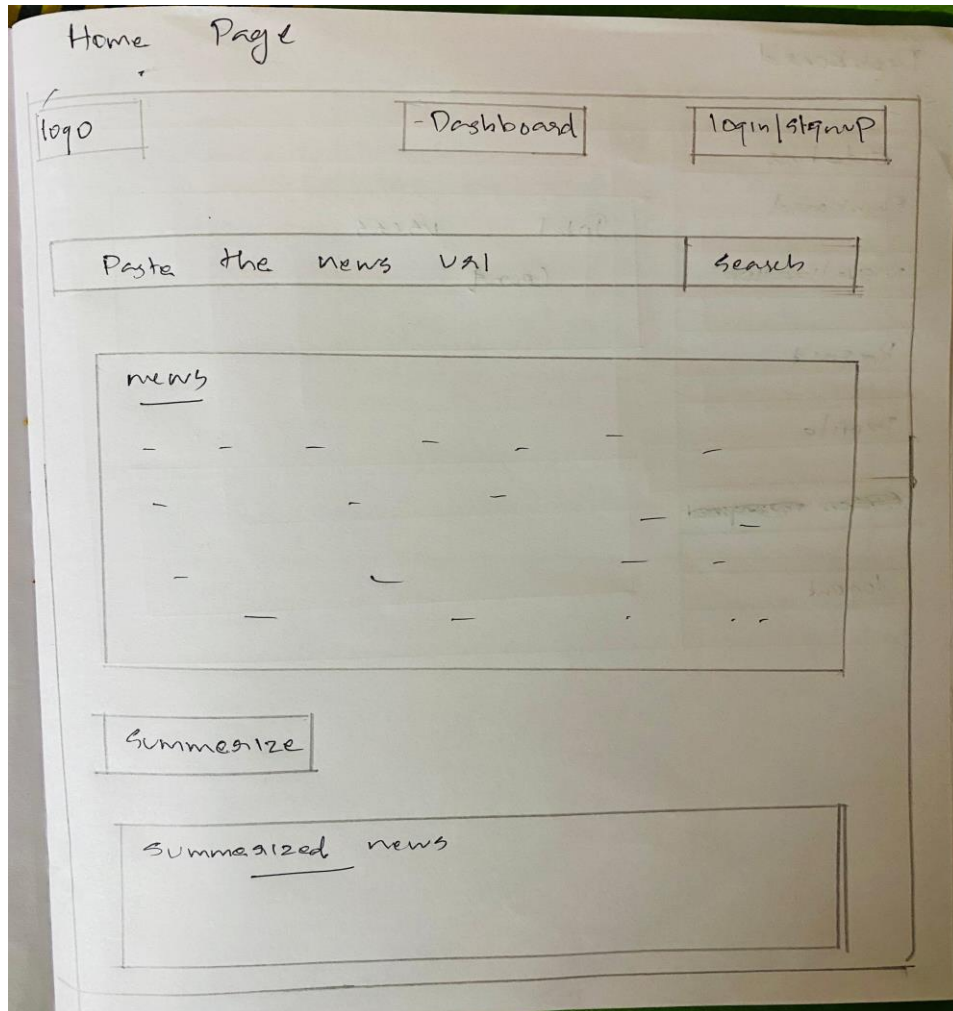
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UI SKETCHES

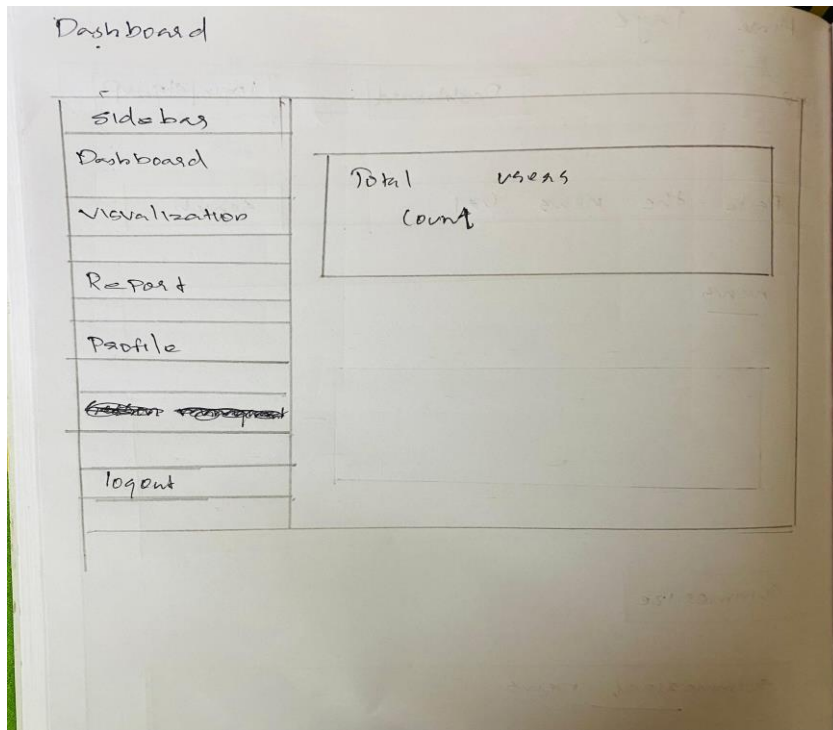
1. Home Page:

The homepage of your web application will showcase a clean and inviting design, offering users a brief introduction to the platform's purpose with a concise tagline and an engaging visual. A top navigation bar will allow quick access to essential sections such as the Dashboard, Login, and Signup, while the main content area will emphasize the application's key features.



2. Dashboard

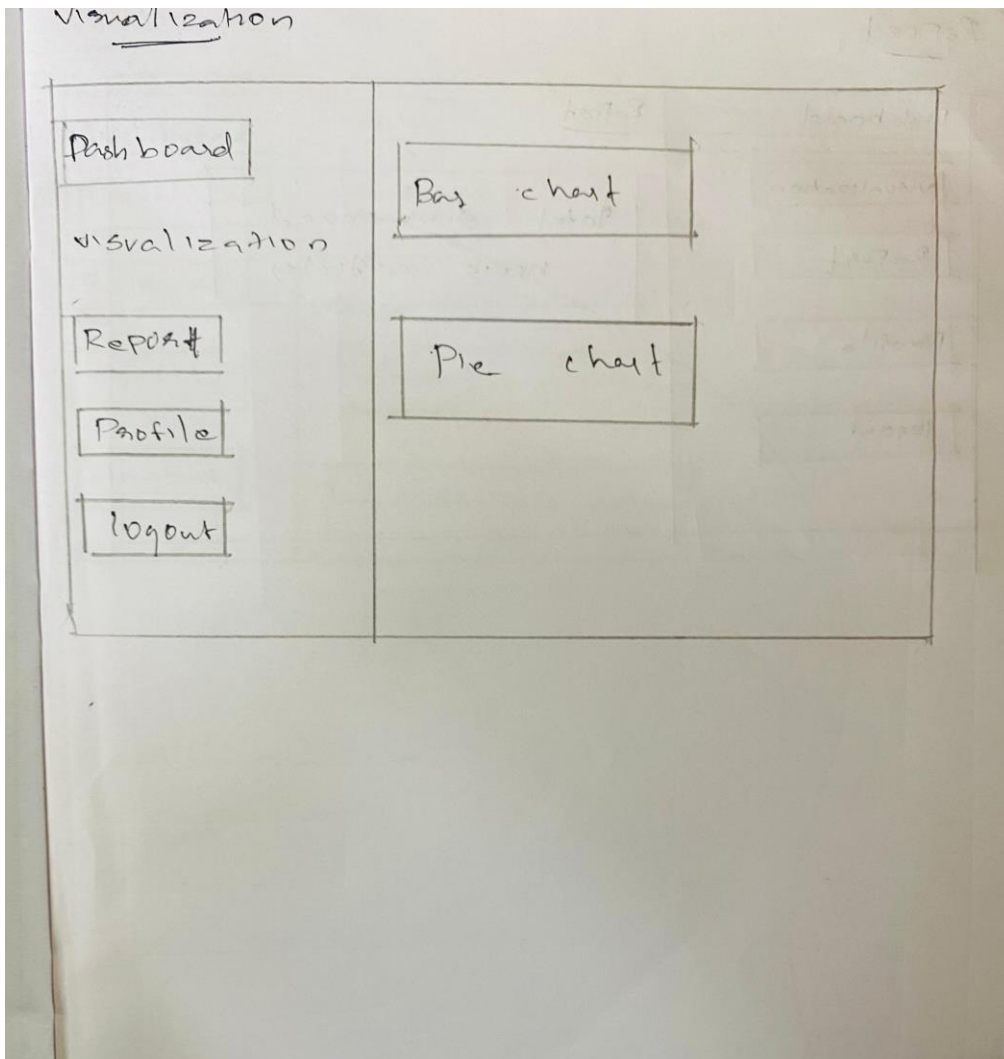
The dashboard design features a left-aligned sidebar with quick access to sections like Dashboard, Visualization, Reports, Profile, and Logout. The main content area panel displaying "Total User Count" This layout provides Total Users Using The Site at a glance, while also allowing easy navigation to other functionalities within the web application.



Sidebar Components:

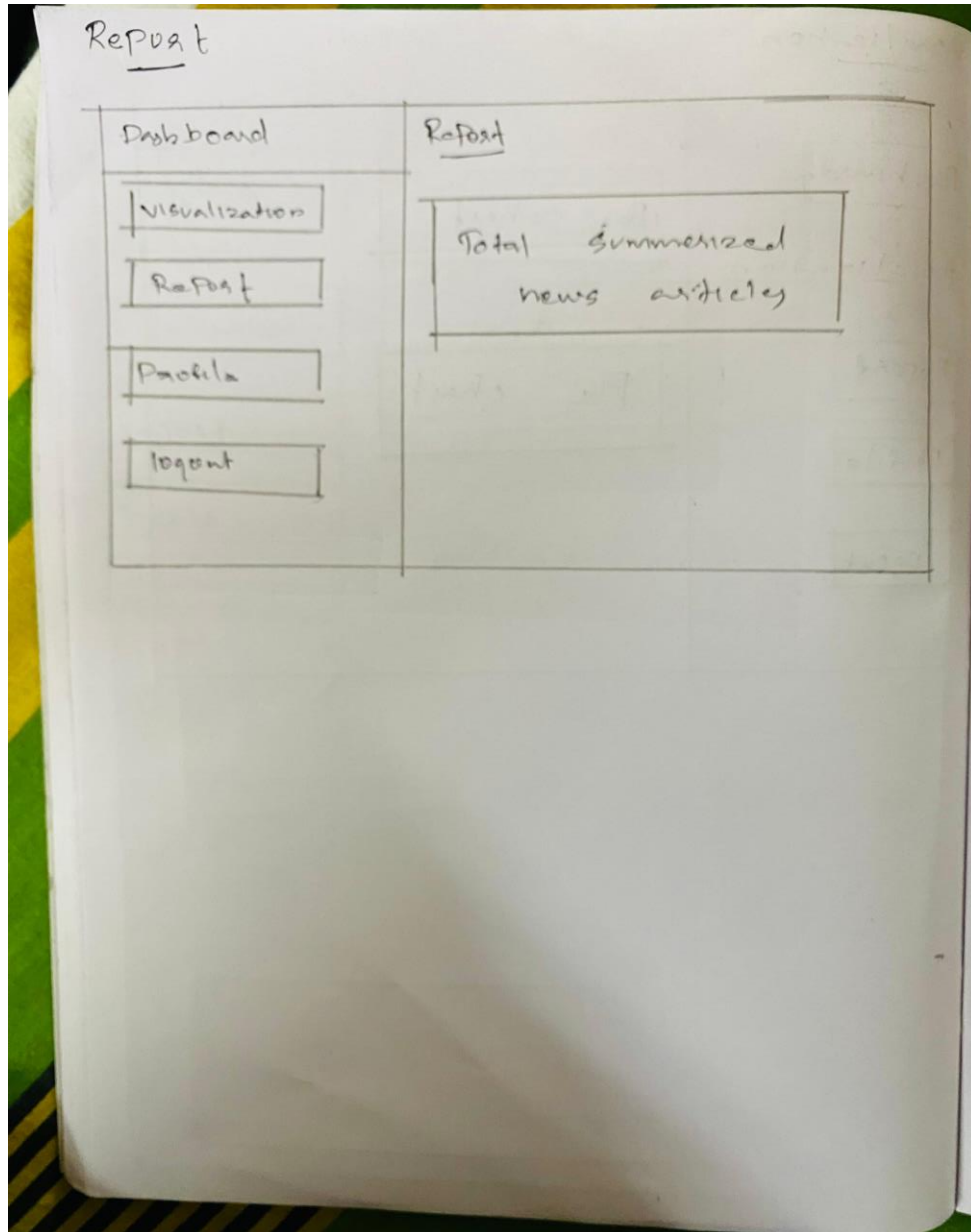
Visualization

The main content area is structured to display multiple types of charts, including a bar chart, a pie chart. This layout allows users to easily view and compare various data visualizations, making it straightforward to interpret insights and trends within the web application.



Reports

The main content area is organized into 'Total Summarized News Articles' Report. This layout provides with detailed insights based on the based on the summarized news articles offering a comprehensive overview of the data generated by the web application.



Profile

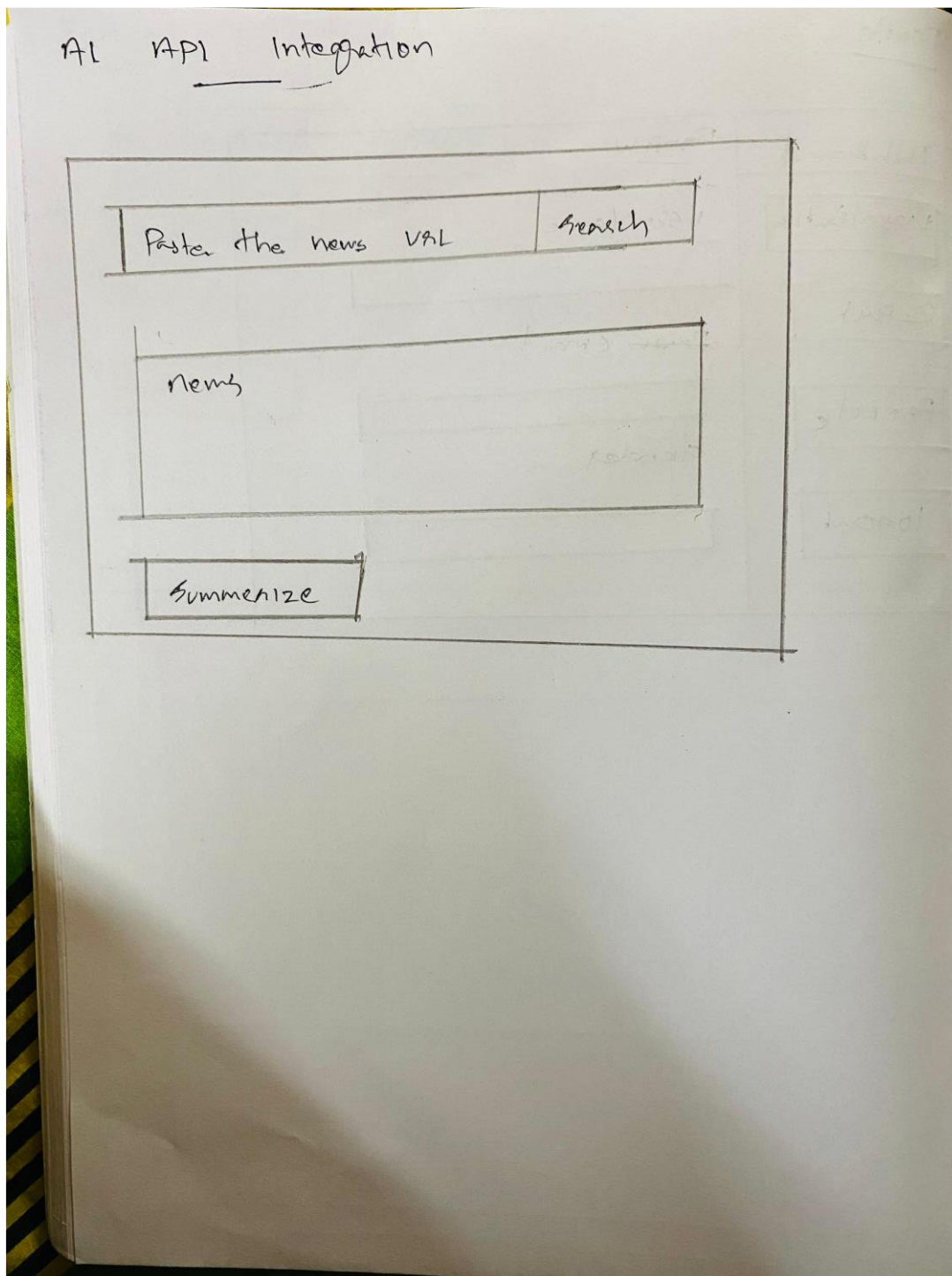
The main content area is dedicated to user information, featuring fields for Name, Email, Password, and Gender. This design allows users to efficiently manage their personal details and session settings, ensuring a streamlined and personalized experience within the web application.

A hand-drawn wireframe of a web application's profile page. The page is divided into a left sidebar and a main content area. The sidebar contains five menu items: 'Dashboard', 'Visualization', 'Report', 'Profile', and 'Logout'. The 'Profile' item is highlighted. The main content area is titled 'Profile' and contains four input fields: 'User Name', 'Email', 'Password', and 'Gender'. The 'Email' field has a small 'x' icon next to it, and the 'Password' field has a small 'i' icon next to it. The 'Gender' field has a small 'x' icon next to it. The wireframe is drawn on a piece of paper with some faint background text.

Dashboard	Profile
Visualization	User Name
Report	Email
Profile	Password
Logout	Gender

AI API Integration

The report generation feature allows users to input a news URL, fetch and summarize the content and then generate a report. This report provides a structured overview of the summarized news, making it easy for users to review and analyze the information.



Data Handling

To efficiently manage data in your web application with PostgreSQL and the Gemini API, structure the data into well-organized tables with appropriate indexing. Allow users to import and export Excel files by converting them to and from CSV format. Integrate the Gemini API to deliver real-time analytics and personalized insights directly from the stored data.

AI Integration Plan for News Summarization System

Objective: The AI integration aims to enhance the News Summarization System by utilizing machine learning to generate concise and relevant news summaries based on user preferences and current news articles.

API Selection: A suitable API, such as Hugging Face's Inference API, will be used to host the trained summarization model. This API will process user inputs and return summarized news articles along with key highlights.

Integration Steps:

1. **Model Deployment:**
 - Train a machine learning model on a dataset of news articles to enable effective summarization.
 - Deploy the model through a chosen API service, providing an endpoint to handle summarization requests and return the summarized news content.
2. **Data Input and Preprocessing:**
 - Users will input data such as news articles or URLs on the AI Integration Page.
 - This input data will be processed and formatted to meet the API's requirements.
3. **API Request and Response Handling:**
 - When users submit the data, it will be sent to the API endpoint via a POST request.
 - The API will process the input, run it through the summarization model, and return the summarized news content and key highlights.
4. **Displaying Summaries:**
 - The API response, which includes the summarized news articles and key highlights, will be parsed and displayed on the summary page.
 - This ensures users receive clear and concise summaries of the latest news.
5. **Error Handling and Validation:**
 - Implement comprehensive error handling to manage issues like incorrect input formats, API downtime, or summarization errors.
 - Provide users with appropriate feedback or prompts to resolve any issues, ensuring a seamless user experience.