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**SMART NEWS APP**

**Introduction**

In the digital era, the way people consume news has shifted drastically, with real-time updates and personalized content becoming essential. The development of a smart news app addresses these needs by combining real-time data fetching, machine learning (ML), and advanced database management to create a seamless and user-focused news consumption experience. Users can access the latest news, ensuring they stay informed about current events.

### **Functional Specification**

#### **1. News Display**

* Home Page: Lists news articles categorized into Breaking News.
* List of all news.
* Dynamic Updates: Periodically refreshes news using API calls.

#### **2. Machine Learning for News Classification (breaking news or not)**

#### **3. API Integration**

* Fetches news articles using APIs like [NewsAPI](https://newsapi.org/) or any other API.

#### **4. Graphs and Charts**

* User Dashboard:
  + Displays visualizations such as:
    - Pie chart of news categories (e.g., Politics 40%, Sports 30%).
    - Line graph of breaking news frequency over time.

#### **5. Databases**

* Local Database:
  + Saves articles for offline viewing.
* Remote Database:
  + Syncs breaking news and article interactions.
  + Maintains user profile.

#### **6. Notifications**

* Breaking News Alerts:
  + Sends push notifications for breaking news.

#### 7. Users can Like and comment the news and Can bookmark news

#### 8. User can share the news

#### **9. Additional Functionalities**

* Language:

News can be translated to 3 or 4 languages.

* Dark Mode:
  + Supports light/dark themes for enhanced user experience.

Use Case Diagram:

