

## Project Documentation

### INSIGHT STREAM: Navigate the News Landscape

#### 1.Introduction

- Project Title: INSIGHT STREAM: Navigate the News Landscape
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#### 2. Project Overview

- **PURPOSE:**

An Insight stream serves as a dynamic platform for sharing expertise, fostering engagement, and empowering viewers with valuable knowledge and perspectives across diverse topics.

##### 1. Knowledge Sharing

##### 2. Audience Engagement

##### 3. Expert Perspectives

##### 4. Informed Decision-making

##### 5. Learning Platform

- **FEATURES:**
  - Real- time data insights
  - Data visualization
  - Customizable dashboards

#### 3. Architecture

- **Modular Design:** Enables flexible content delivery.

- Data Pipeline: Processes insights from various sources.
- Content Management: Organizes curated insightful content.

#### 4. Setup Instructions

- Prerequisites:

-Technical Infrastructure

-Software Tools

-Team Expertise

-Budget Allocation

- Installation Steps:

#Server/Cloud Configuration

#Install Required Software

#Database Setup

#### 5. Folder Structure

insight- stream/

```

├── app/
|   ├── controllers/
|   ├── models/
|   ├── services/
|   ├── utils/
|   └── views/
├── assets/
|   ├── css/
|   ├── js/
|   ├── images/
|   └── fonts/

```

## 6. Running the Application

- Frontend:
  - User Interface (UI) for users to interact with Insight Stream.
  - Display insights, content curated by the platform.
  - Handle user interactions (like comments, shares).
- Backend:
  - Serve data/insights to the frontend.
  - Manage content curation, storage.
  - Handle analytics, user data processing.
- Access:
  - #Start Node.js server node server.js
  - #Server listens on port (e.g.,3000)
  - #http://localhost:3000

## 7. API Documentation

- User:
  1. GET /api/users/{id}: Fetch user details by ID.
    - Response: User profile data (name, email...).
  2. POST /api/users: Create a new user.
    - Request Body: { "name": "string", "email": "string" }.
    - Response: Created user details.
  3. PUT /api/users/{id}: Update user details.
    - Request Body: { "name": "newName" }.
  4. DELETE /api/users/{id}: Delete a user.
- Projects:
  1. GET /api/projects: List projects.
    - Response: Array of projects with IDs, names.

2. GET /api/projects/{id}: Fetch project details by ID.

- Response: Project data (name, description...).

3. POST /api/projects: Create a project.

- Request Body: { "name": "string", "description": "string" }.

4. PUT /api/projects/{id}: Update project details.

- Chats:

1. GET /api/chats/{projectId}: Get chats for a project.

- Response: Array of chat messages.

2. POST /api/chats: Send a chat message.

- Request Body: { "projectId": "id", "userId": "id", "message": "text" }.

3. GET /api/chats/{id}/messages: Fetch messages in a chat thread.

## 8. Authentication

### ## Example (Node.js/Express)

// Login route

```
app.post('/login', (req, res) => {  
  const { username, password } = req.body;  
  
  // Verify credentials  
  if (validCredentials) {  
    const token = generateToken(user);  
    res.json({ token });  
  } else {  
    res.status(401).send("Unauthorized");  
  }  
});
```

// Protected route

```
app.get('/api/user', authenticateToken, (req, res) => {
```

```
  res.json(req.user);
```

```
});
```

## 9. User Interface

1. **\*Dashboard\***: Overview of insights.
2. **\*Content Feed\***: Shows curated content.
3. **\*Profile\***: User settings.
4. **\*Search\***: Find insights/projects.
5. **\*Interactions\***: Comments, likes

## 10. Testing

Manual testing involves human testers interacting with the application to identify issues.

Tools: Jest, Cypress, Mocha