## **Internship Weekly Report - Week 1**

## **Executive Summary:**

During the first week of my internship, I successfully initialized three projects ('newsSum', 'queryl', and 'ResReview'). For ResReview (AI-Powered Resume Screener), I completed significant technical milestones including backend—frontend setup, MongoDB Atlas integration, and authentication APIs with JWT. For newsSum and queryl, I focused on repository setup, installing required frameworks/libraries, and ensuring the development environments were ready.

## **Projects & Progress:**

- 1. ResReview (Al-Powered Resume Screener):
  - Repository Initalization:
    - Created monorepo structure with `backend/` (Spring Boot) and `frontend/` (React + Vite).
  - Backend Setup (Spring Boot):
    - O Generated project with Spring Boot 3.5.5 (Java 21) and Maven.
    - O Added dependencies: Spring Web, Spring Data MongoDB, DevTools.
    - O Created initial `HelloController` and verified `/api/hello` endpoint.
  - Frontend Setup (React + Vite):
    - Initialized project and confirmed rendering of starter template.
    - O Connected frontend to backend via Axios/Fetch and verified `/api/hello` consumption.
  - MongoDB Atlas Integration:
    - O Created cluster, configured credentials, and tested connectivity from backend.
    - O Properties managed with `.env` placeholders (sensitive data excluded from repo).
  - Authentication Module:
    - o Implemented User model, UserRepository, UserService, and AuthController.
    - Added password hashing with BCrypt.
    - O Configured JWT utility for token generation and validation.
    - O Verified '/api/auth/register' and '/api/auth/login' using Insomnia.
  - Frontend Auth UI:
    - O Built Login.jsx and Register.jsx pages using Tailwind CSS.
    - Integrated with backend APIs.
    - Stored JWT tokens in localStorage on login success.
- 2. newsSum (Al-Powered News Summarizer Portal):
  - Initialized repo structure with `backend/` (Django) and `frontend/` (React).
  - Installed dependencies:
    - o Backend: Django, Django REST Framework
    - o Frontend: React (Vite)
  - Verified Django project creation and React frontend rendering.
  - Ensured backend and frontend servers start without errors.
- 3. queryl (Al-Chatbot for Student Queries):
  - Initialized repo structure with `backend/` (Node.js + Express) and `frontend/` (React).
  - Installed dependencies:
    - Backend: Express
    - o Frontend: React (Vite)
  - Verified React app runs locally.

## **Summary of Accomplishments:**

- Initialized three projects (ResReview, newsSum, queryl).
- Set up full monorepo structure with frontend & backend separation.
- Established MongoDB Atlas connectivity in ResReview.
- Implemented user authentication with JWT in ResReview.
- Created styled login/register pages in React with Tailwind CSS.