**Project Report: Next.js 14 Authentication Dashboard**

USER AUTHENTICATION AND DASHBOARD SYSTEM USING NEXT.JS 14

**Project Objective**

This project aims to develop a secure web application using Next.js 14 that allows users to:

- Register for an account

- Log in using credentials

- Access a protected dashboard upon successful authentication

The project also includes backend database integration using PostgreSQL, and all scripts used to create the database are included. A full database backup is also provided.

**Technologies Used**

Technology: Purpose

Next.js 14 : Framework for building full-stack React apps

NextAuth.js : Authentication with credentials (email + password)

PostgreSQL : Relational database for storing user data

Prisma : ORM for managing database schema and access

Tailwind CSS: Styling and layout

Git & GitHub : Version control and code hosting

**Project Structure**

The project is structured into key folders:

- app/ – Next.js app directory (includes login, register, dashboard)

- Database/ – Contains:

- Create\_tables.sql: All scripts used to create the PostgreSQL database

- Backup.sql: Full backup of the database

- .env.example – Sample environment variable configuration

**Functionality Implemented**

* User Registration – Users can create an account by providing their name, email address, and password.
* User Login – Users log in using their email and password.
* Session Management – Logged-in users remain authenticated using cookie-based sessions.
* Protected Dashboard – Only accessible to logged-in users. Database Integration – PostgreSQL stores user data. Prisma handles access.

**Database Scripts and Backup**

- Create\_tables.sql contains the SQL statements used to create the users table.

- Backup.sql is a full backup of the database created using pg\_dump.

**How the Application Was Built**

1. A new Next.js 14 project was created using npx create-next-app@latest

2. NextAuth.js was installed and configured

3. PostgreSQL and Prisma were set up for the backend

4. Routes were created for login, registration, and the dashboard

5. Environment variables were configured