

# Project Report: 30-Day Data Science Study Plan Website

## 1. Introduction

The 30-Day Data Science Study Plan Website is an interactive learning platform designed to help students master key Data Science concepts in a structured manner. It presents a daily learning schedule covering topics from Python basics to advanced Machine Learning and Deep Learning concepts.

## 2. Objectives

- To provide a well-structured learning path for students interested in Data Science.
- To create an interactive and engaging platform where users can track their progress.
- To incorporate dynamic content visibility and smooth navigation between lectures.
- To ensure accessibility and user-friendliness.

## 3. Website Features

- Lecture Sections: Organized into 30 lectures, each covering a fundamental topic.
- Content Visibility Control: Lectures are hidden by default and revealed only when the user clicks the 'View Course' button.
- Progress Tracking: Users can mark a lecture as completed and move to the next lecture.
- Navigation: Smooth scrolling and seamless transitions between lecture sections.
- Responsive Design: Ensures usability across different devices.

## 4. Technical Implementation

Frontend Development:

- HTML: Used for structuring the webpage.
- CSS: Applied for styling, animations, and making the website visually appealing.
- JavaScript: Handles interactivity, content visibility toggling, and lecture navigation.

Backend Development (Future Scope):

- A database can be integrated to store user progress and provide personalized recommendations.
- User authentication and login features can be added for better engagement.

## 5. Code Overview

HTML Structure:

- Contains a navigation bar, a header section, and a main content area.
- Lecture numbers are listed in an ordered format.
- Each lecture contains a description and a button to reveal the content dynamically.

#### JavaScript Functions:

- Toggle Content Visibility: Displays lecture content upon clicking 'View Course'.
- Lecture Completion Tracking: Users can navigate to the next lecture after completing the current one.
- Smooth Scrolling: Ensures better user experience when moving between sections.

## 6. Challenges and Solutions

- Ensuring Content Readability: Used collapsible sections to show only relevant content.
- Managing User Navigation: Implemented JavaScript to dynamically update the lecture display.
- Performance Optimization: Minimized unnecessary DOM manipulations and ensured efficient event handling.

## 7. Future Enhancements

- Add a user profile system to store progress.
- Implement quizzes and assessments for each lecture.
- Introduce a discussion forum for student interactions.
- Create a mobile app version of the study plan.

## 8. Conclusion

The 30-Day Data Science Study Plan Website provides an effective and engaging way for students to learn Data Science in a structured manner. With future enhancements, it has the potential to become a full-fledged learning platform.