



## **Orange Coding Academy**

### **Master Project Documentation**

Coders

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# Chapter 1: Introduction

## 1.1 Objective

Coders is an online school designed to provide comprehensive programming education. Its primary objective is to offer structured programs spanning several months to help individuals become proficient in various programming languages and tools. The platform aims to cater to both beginners and intermediate learners, providing them with a clear learning path, hands-on projects, and the support they need to succeed in the tech industry. Coders focuses on empowering individuals to build practical skills that can be applied in real-world scenarios, ultimately preparing them for the job market or further specialized studies in programming.

## 1.2 Technologies Used

### 1- Front-End

- HTML (Hyper Text Markup Language).
- CSS (Cascading Style Sheets).
- JavaScript.
- Bootstrap.

### 2- Back-End

- ASP.NET Core API
- SQL Server.

# Chapter 2: Requirements and Analysis

## 2.1 Functional Requirements

Functional requirements describe the expected behavior of the system, focusing on what the system should do.

### 2.1.1 User:

**Register/Login:** Users can register for a new account or log in with their credentials.

**Contact Form:** Users can send messages to the platform via a "Contact Us" form.

**Blog:** Users can view blog posts published on the platform.

**Programs:** Users can browse available programs and make payments for the programs they wish to enroll in.

**Learning Materials:** Users can access learning materials such as videos, assignments, and they can submit assignments through the platform.

**Profile Management:** Users can view and update their personal information on their profile page.

### 2.1.2 Instructor/Admin:

**Login:** Admins can log in to the platform.

**Admin Management:** Admins can add other admins and edit their data.

**User Management:** Admins can view all users, add new users, and delete existing users.

**Student Management:** Admins can view all students, add new students, and delete existing students.

**Program Management:** Admins can view all programs, add new programs, and delete existing programs.

**Assignment Management:** Admins can view all assignments, add new assignments, and delete existing assignments.

**Blog Management:** Admins can view all blog posts, add new blogs, and delete existing blogs.

**Services Management:** Admins can view all services, add new services, and delete existing services.

## 2.2 Non-Functional Requirements

Non-functional requirements describe the general attributes and qualities of the system, focusing on how the system performs and interacts with users.

### 2.2.1 Security:

**Admin Access Control:** Only authenticated admins can access administrative functionalities, including managing users, programs, and services.

**User Authentication:** The platform must ensure secure login and registration processes by using password hashing to protect user credentials. Strong password encryption and hashing mechanisms will be implemented.

### 2.2.2 User Friendly:

I tried my best to make this system user interface friendly.

### 2.2.3 Usability:

The website is easy to use by the users, I tried to provide easy control interfaces in the design.

#### 2.2.4 Availability:

In the future, the website will be available to the user anytime and anywhere.

#### 2.2.5 Responsive Web Design:

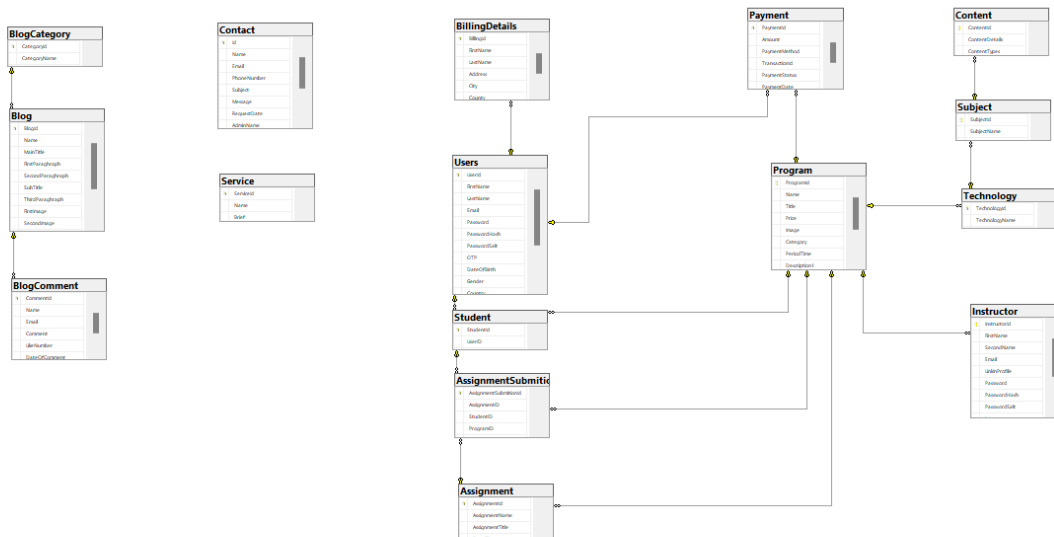
The website is fully responsive on all devices.

### 2.3 Test Cases

When the user enters authenticated page without privileges it will redirect him to home page.

When the user wants to book in hotel without login it will be redirect him to login page.

### 3.1 Database Schema



## Relationships:

- **Users:**

- Has a **one-to-many** relationship with **Student** (one user can be linked to many students).
- Has a **one-to-many** relationship with **BillingDetails** (one user can have many billing details).

- **Program:**

- Has a **many-to-one** relationship with **Technology** (many programs can belong to one technology).
- Has a **many-to-one** relationship with **Subject** (many programs can be related to one subject).
- Has a **one-to-many** relationship with **Assignment** (one program can have many assignments).

- Has a **one-to-many** relationship with **AssignmentSubmission** (one program can have many assignment submissions).
- Has a **one-to-many** relationship with **Payment** (one program can be linked to many payments).

- **Instructor:**

- Has a **one-to-many** relationship with **Program** (one instructor can be responsible for many programs).

- **Assignment:**

- Has a **one-to-many** relationship with **AssignmentSubmission** (one assignment can have many submissions).

- **Student:**

- Has a **one-to-many** relationship with **AssignmentSubmission** (one student can have many assignment submissions).

- **Payment:**

- Has a **many-to-one** relationship with **BillingDetails** (many payments can be linked to one set of billing details).
- Has a **many-to-one** relationship with **Program** (many payments can be made for one program).

- **Blog:**

- Has a **many-to-one** relationship with **BlogCategory** (many blogs can belong to one category).
- Has a **one-to-many** relationship with **BlogComment** (one blog can have many comments).

- **BlogComment:**

- Has a **many-to-one** relationship with **Blog** (many comments can belong to one blog).

- **Contact:**

- Represents independent data for user inquiries or messages sent via the contact form.

- **Service:**

- Represents services offered, which may be independent or connected to other aspects of the platform in the application layer.



# Chapter 4: Conclusion & Future work

## 4.1 Conclusion

The Coders platform was designed to bridge the gap in online programming education by providing users with an intuitive and accessible way to learn various programming languages and technologies. By offering structured programs that span multiple months, Coders empowers individuals to acquire the practical skills needed to thrive in the tech industry.

## 4.2 Future Work

- **Advanced Analytics:**

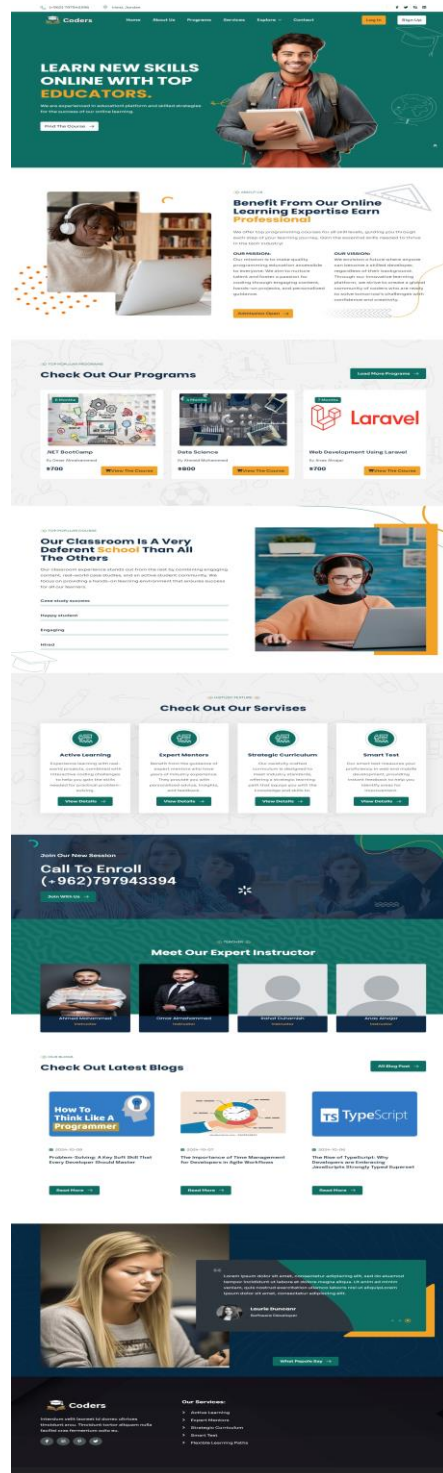
Implement detailed analytics for students and instructors to track course completion rates, student performance, and overall platform engagement. This will provide insights into how learners are progressing and help improve the platform's learning outcomes.

- **Integration with Third-Party Tools:**

Integrate with popular third-party tools like video conferencing platforms for live classes, and payment gateways to streamline the course payment process.

## 4.3 Some Pages of the Website:

Home Page:



## Programs:

+962 797943396

Irbid, Jordan

f t g

Coders

Home About Us Programs Services Explore Contact

Log In Sign Up

# PROGRAM

Home // Program

Categories

☐ All

☐ Web

☐ Data Science

☐ Mobile

All Category

6 Months

**.NET BootCamp**

Build Dynamic Web Apps With .NET Framework.

By Omar Almahammed

\$700

View The Course

4 Months

**Data Science**

Unlocking the Power of Data: A Comprehensive Guide to Data Science and Machine Learning

By Ahmed Mohammed

\$800

View The Course

7 Months

**Web Development Using Laravel**

Build Dynamic Web Apps With Laravel Framework.

By Anas Alnajjar

\$700

View The Course

6 Months

**Flutter Bootcamp**

Flutter Bootcamp: Build Cross-Platform Apps for iOS and Android

By Mahdi Alabneh

\$600

View The Course

Join Our Newsletter

Subscribe our newsletter to get our latest update & news.

Enter your email

Subscribe Now

Coders

Interdum velit laoreet id donec ultrices tincidunt arcu. Tincidunt tortor aliquam nulla facilisi cras fermentum odio eu.

f s p t

Our Services:

Active Learning

Expert Mentors

Strategic Curriculum

Smart Test

Flexible Learning Paths

## Program Details:



### Unlocking The Power Of Data: A Comprehensive Guide To Data Science And Machine Learning

Overview Curriculum Instructor

#### COURSE DESCRIPTION

Master the art of data analysis and machine learning by diving deep into the most in-demand skills required in today's data-driven world. This course offers a comprehensive introduction to key concepts and hands-on techniques for exploring, analyzing, and visualizing data. Learn how to leverage powerful tools like Python, R, and SQL, along with advanced machine learning algorithms to uncover patterns, build predictive models, and make data-driven decisions. By the end of this course, you will have the ability to transform raw data into actionable insights and effectively communicate your findings to stakeholders.

#### WHAT WILL I LEARN FROM THIS COURSE?

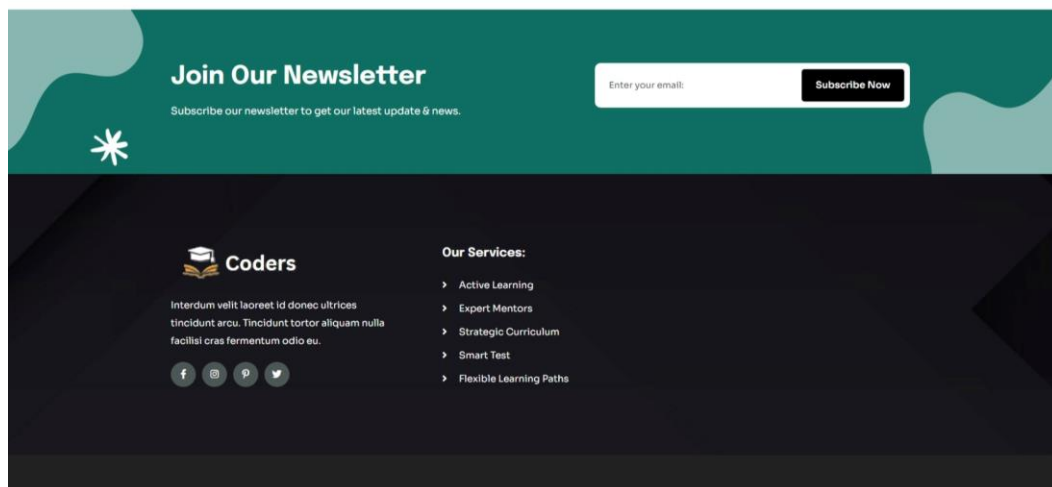
In this course, you will learn fundamental data science techniques, including how to clean and process data using tools like Python and R. You will explore the principles of exploratory data analysis, enabling you to summarize key data characteristics through visual and statistical methods. Additionally, you will gain hands-on experience with machine learning algorithms such as regression, decision trees, random forests, and clustering. The course will also cover data visualization, teaching you to create compelling visual representations of data using libraries like Matplotlib and Seaborn, as well as tools like Power BI, to communicate insights effectively. You'll develop predictive models to forecast outcomes based on historical data, and through real-world projects, you'll apply machine learning techniques to practical data science challenges faced in various industries like finance, healthcare, and technology.

Course Fee \$800

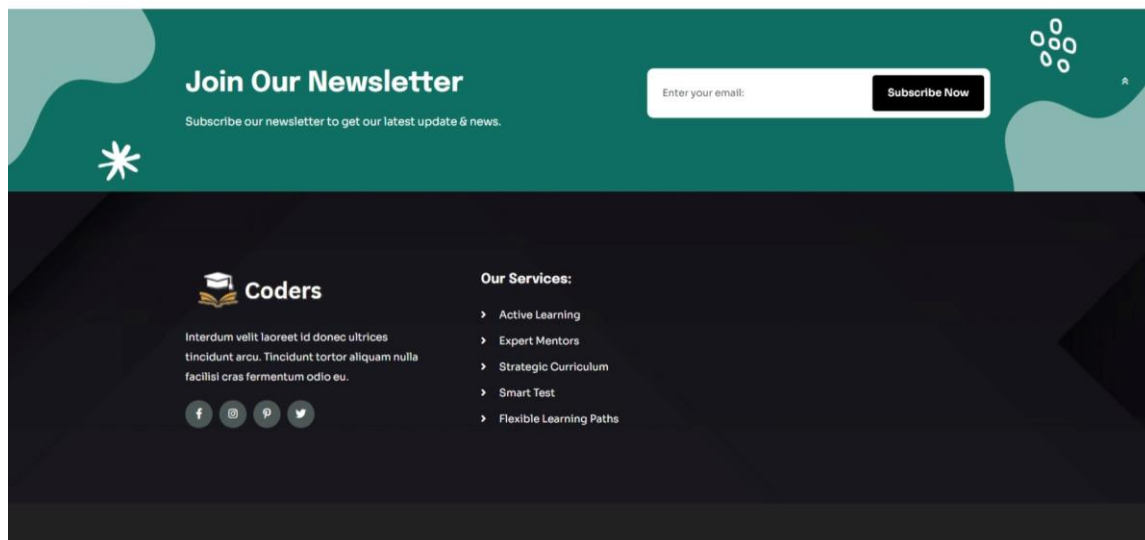
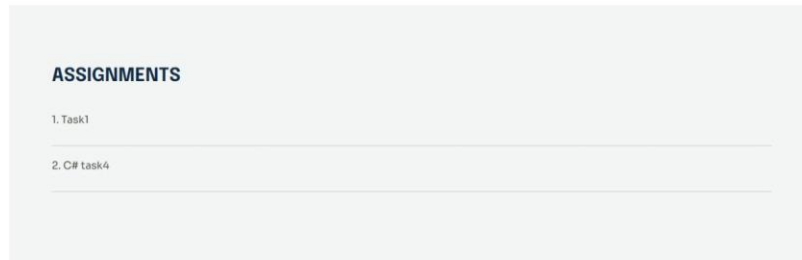
Buy Ticket →

Class Day Monday-Friday

Language English/Arabic



## Assignment page:



## Booking form:

The image shows a dark-themed booking form for 'WONDROUS'. The header includes the brand name and navigation links: HOME, CITIES, ABOUT US, CONTACT US, LOGIN, and REGISTER. The main heading is 'Book Now' with a breadcrumb trail 'Home / Book Now'. The form contains the following fields:

- Name: \* (text input)
- Email: \* (text input, placeholder: amazing@lorem)
- Phone Number: \* (text input, placeholder: 0000000000000000)
- Room type: \* (dropdown menu, selected: Choose a room)
- Number of Rooms: \* (text input)
- Adult per Room: \* (text input)
- Child per Room: \* (text input)
- Check-in: \* (date input, placeholder: 20/09/2020)
- Check-out: \* (date input, placeholder: 20/09/2020)

A blue 'Submit' button is located at the bottom of the form. Below the form is a footer section with three columns:

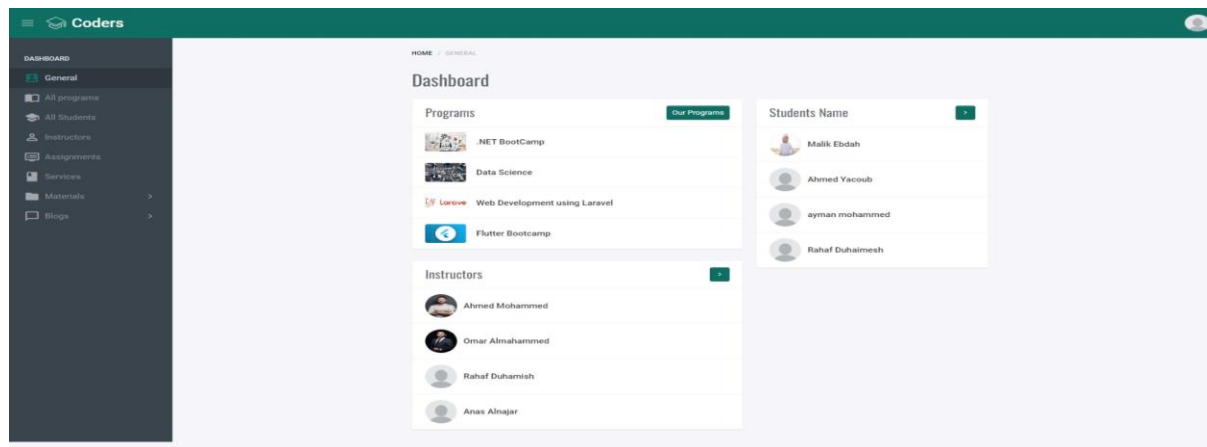
- ABOUT**: WONDROUS is a website that helps you find the best and available hotels.
- QUICK LINKS**: Home, Cities, About, Contact.
- CONNECT WITH US SOCIALLY**: Facebook, Twitter, Instagram icons.

The footer also includes a copyright notice: © 2020 WONDROUS. All rights reserved. Made by the creative team of WONDROUS.

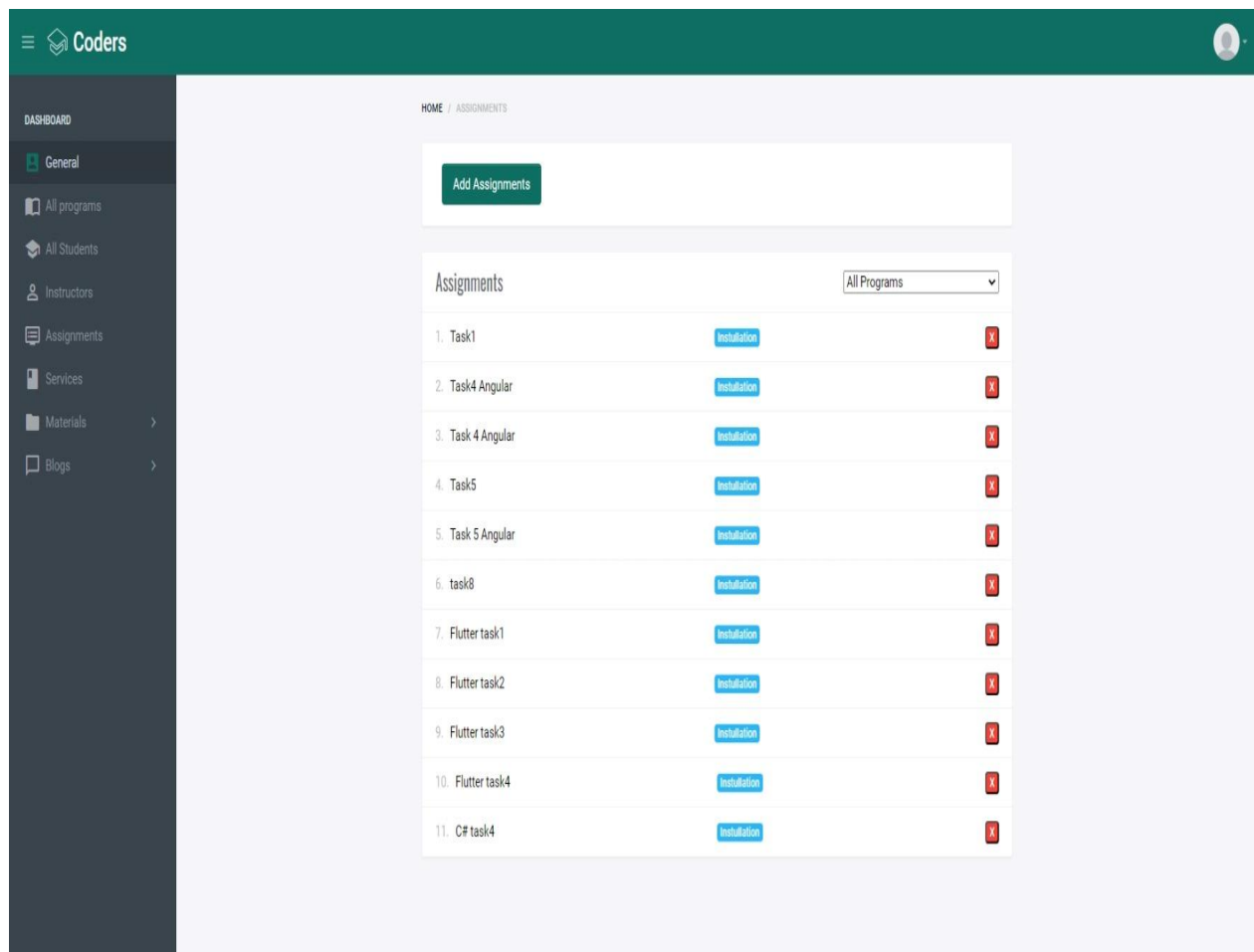
## User profile:

The image shows a user profile page for 'Coders'. The top navigation bar includes links: Home, About Us, Projects, Services, Portfolio, and Contact. The main heading is 'SIGN IN' with a sub-heading 'Welcome, User!'. Below this is a sign-in form with fields for 'Email' and 'Password', a 'Forgot Password?' link, and a 'Sign In' button. A message below the form says: 'If you are having trouble signing in, click here.' Below the sign-in form is a 'Join Our Newsletter' section with a text input and a 'Subscribe Now' button. The footer section includes the 'Coders' logo, a brief description, and a list of services: Web Design, Mobile App, E-commerce, and Social Media. It also features social media icons and a 'Contact Us' button.

## Admin dashboard:



## Assignment table:



## Program details:

Coders

DASHBOARD

General

All programs

All Students

Instructors

Assignments

Services

Materials

Blogs

### Flutter Bootcamp

Program Details

NAME

Flutter Bootcamp

TITLE

Flutter Bootcamp: Build Cross-Platform Apps for iOS and Android

PRICE

600

CATEGORY

Mobile

PERIOD TIME

6 Months

FIRST DESCRIPTION

The Flutter Bootcamp is designed to transform you into a proficient app developer, equipping you with the skills needed to build stunning, high-

SECOND DESCRIPTION

In this bootcamp, you will start by mastering the fundamentals of Flutter and Dart, understanding how to set up your development environment and create

DATE OF START

12/01/2024

IMAGE

Choose File No file chosen

PLAN

Choose File No file chosen

Delete Program!

Submit

Download Plan

Instructors

Mahdi Ababneh

Students

batool mohammed