

SPRING BOOT

Assignment-1-Video Creation - 10 Marks Deadline 20-11-2024

Assignment-2-Descriptive - 20 Marks Deadline 05-12-2024

Class Test 1 MCQ [Offline]- 10 Marks 21/11/2024

Certification - 10 Marks [min 10 Hours) Deadline 10-12-2024

Mini Project - 50 Marks Deadline 15-12-2024

Total 100 Marks

Assignment-1-Video Creation - 10 Marks Deadline 20-11-2024

All of you create screen recorder of Explanation of Iteration 1,2 and 3 programs in Pdf document. all of you share your URL of google Drive Link.
<https://forms.gle/7tWBMAKR3NLkSf739>

Program PPT Link

<https://drive.google.com/file/d/1nDrgCYUV9uEwwRrNCUiwslQ4pWfYVL7q/view?usp=sharing>

Assignment-2-Descriptive - 20 Marks Deadline 05-12-2024

Submit the answers for the questions in the pdf document

<https://drive.google.com/file/d/1DpnWuCQ92MjB-SE9S1XNvLP-0jf9Ljp3/view?usp=sharing>

Class Test 1 MCQ - 10 Marks Date 21/11/2024

10 MCQ questions will be conducted in the classroom. **Topic- Spring Boot Basics**

Certification - 10 Marks [min 15 Hours) 10-12-2024

Sample Course URLs / you can do any other URL course also

<https://www.scaler.com/topics/course/java-spring-boot-blogging-app/>

https://alison.com/course/building-web-applications-with-java-spring-boot#google_vignette

<https://alison.com/course/a-complete-guide-to-java-spring-mvc>

<https://www.mygreatlearning.com/academy/learn-for-free/courses/dockerize-spring-boot-application>

<https://www.mygreatlearning.com/academy/learn-for-free/courses/introduction-to-spring-framework>

<https://www.simplilearn.com/introduction-to-java-spring-framework-fundamentals-skillup>

Mini Project - 50 Marks Deadline 15-12-2024

Select any one title from the below list or choose your own and form a team consists of 3 to 4 members and prepare report and demo of the project. Submit both hard and soft copy of the report and video explanation of the output demonstration.

Create 1 folder in the shared drive and name the folder as your Batch_ No . for eg., Batch_5

Batch no will be allocated and informed to all once you filled your project title and team members details.

Best Spring Project Ideas for Beginners

Spring is a versatile framework for building Java applications, and there are plenty of beginner-friendly project ideas to help you get started. Here are some of the best Spring Project Ideas that are fit for beginners:

1. Virtual Bookstore

Develop a user-friendly and efficient virtual platform where book admirers can explore, select and purchase books. This platform will replicate the experience of visiting a physical bookstore in a digital environment, it will give an engaging space where users can have a Digital Book Exploration, Easy selection of books as per their interest they can have detailed book information, and can have a hassle-free shopping of their choice.

The Virtual Bookstore project aims to replicate the experience of browsing and buying books online by taking more than enough information about the particular book, this process of exploring and purchasing books online will give a feel to users just as one would in a physical bookstore. Users will search for books, add them to their shopping cart, and will proceed to checkout. This application provides an engaging and user-friendly interface for bookaholics.

Techstack: Spring boot, Spring Security, Spring Data JPA

2. Personal Finance Tracker

Personal Finance Tracker project is to empower individuals to effectively manage their personal finances with great tools and capabilities. This platform will provide users to take control of their financial activities, monitor their financial health, and can track their expenses and income. With the help of this platform, a user can

understand their financial position, and identify areas of improvement, so that they can make informed decisions about their spending and saving habits.

The Personal Finance Tracker aims to simplify financial management for users. This application will provide users with a user-friendly platform where users can input their income and expenses, users can categorize transactions, and can uncover patterns in spending behaviors. This platform provides a Data Categorisation that will give users a clear picture of where their money is going, this aids identifying areas for potential budget adjustments.

Techstack: Spring boot, Thymeleaf, Spring Data JPA

3.Event Management System

This platform is for Streamlining Event Organisation which will organize, manage events and allow users to register, access, schedule, and receive event-related notifications. The core objective of Event Management System is to provide facilities which will help in making efficient event planning, and organization. This project addresses the efficient event coordination, enhances event attendees experience, and most important that is needed in every event planning, the Centralised Information Hub, which will give event-related information, eliminate confusion of attendees by providing up-to-date schedules, event details, and logistic information.

The Event Management System simplifies the event coordination by providing both facilities of event organizers, and attendees by giving them real-time notifications, to ensure that participants stay informed about the event updates, changes, and important announcements. This application provides event organizer tools for managing the attendees participation, registrations, tracking of attendance, update event details on time, and can facilitate free communication with participants, also participants can put their reviews and feedbacks.

Techstack: Spring boot, Spring Security, Spring Data JPA

4.Health and Fitness App

This application will help the users that can track their workouts, set fitness goals, daily meals, can have a challenge for maintaining their health, gain/lose weight, and overall monitor the progress. The project would design and develop a comprehensive mobile application so that users may always keep in touch with your interactive application functionality. The primary objective of this project is to effectively manage health and fitness journeys.

The Health and Fitness App provides users with a platform to log into their daily routine fitness workout, can have track of their calories burned, and set challenging fitness targets, the application will offer visual representation of progress, and motivate users to be committed to their fitness routines. The application will guide the user for refining workout routines and making informed decisions for their health.

Techstack: Spring boot, Spring MVC, Spring Data JPA

5. Online Learning Platform

An Online Learning platform where the instructors can create courses and students can enroll, access the courses materials as per their needs, and track their progress. The main objective to develop this Online Learning Platform is to provide a dynamic and efficient online environment that will support both teaching and learning processes. With the help of this application one can create and manage various courses, having the remote access, and can evaluate learning outcomes by progress tracking and assessments.

The Online Learning Platform aims to facilitate online education by providing instructors a platform to design different courses with various specifications so that students could get a quality education remotely. This application will provide course enrollment, content delivery, and as well as progress tracking. This project will make it hassle-free for students to explore available courses and can achieve seamless content delivery. The online learning platform will enable students to access lectures, readings, multimedia, and assignments, and will also receive constructive feedback through guides.

Techstack: Spring boot, Spring Security, Spring Data JPA, React, Redux, CSS Framework, Node.js, JWT, MongoDB/MySQL, Swagger, Git, Video Streaming API

6. Social Media App

Develop a Social Media App that will allow users to create profiles whether personal/business, connect with friends on social media, and can have great interaction by creating a dynamic space that facilitates connections, communication. Through this platform users can share diverse content such as images, videos, text updates, links. The social media application manages users identity, interests, and various activities. This application includes privacy controls over contents and posts.

The Social Media App provides a great facility where users connect with each other and have endless interactions. Users will create profiles, add friends, post updates, and engage in multimedia content sharing. This platform will deliver real-time feeds and ensure users may be connected with latest activities and content from their connections.

Techstack: Spring boot, Spring MVC, Spring Data JPA, Spring Websockets, React, Redux, CSS Framework, Node.js, JWT, MongoDB/MySQL, Swagger, Git

7. Travel Planner

Develop an application for tourists to assist them in making travel planning and organize their trips. This project will create detailed travel itineraries, the travel planner will help users to make efficient trip planning, will give real-time weather information, customizable routes, and transportation options.

The Travel Planner simplifies trip planning by allowing users to search for destinations, generate dynamic itineraries, whereas the application serves as a

dedicated tool for travelers to enhance traveling experience by effortless trip planning, and weather preparedness. The Travel Planner project aspires to be a reliable companion in travelers, and journeys. By this project users will get real-time updates on time and elevate the overall travel planning process.

Techstack: Spring boot, Spring Data JPA, Thymeleaf, React, Redux, CSS Framework, Weather API, Google place API, Node.js, JWT, MongoDB/MySQL, Swagger, Git

8. Task Management Tool

Creating a task management tool which will help users to manage their tasks and projects. The project aims to provide users with a robust platform that simplifies task management, boost productivity, and enhance collaboration with progress tracking and giving deadline management to users, with real-time updates.

The Task Management Tool project provides great functionality that will organize and structure environment to manage task and projects effectively, it will allow users to create, assign, prioritize, and track tasks from creation to completion means tracking the entire lifecycle of the projects and also offers the insights into the status of tasks and advancement of projects.

Techstack: Spring boot, Spring Data JPA, Spring Websockets, CSS Framework, Redux, JWT, MongoDB, Swagger, Git

9. Language Learning App

Creating a Language Learning App that provides vocabulary challenges and interactive flashcards across a variety of languages, the platform supports language learning through the interactive quizzes, flashcards, and personalized learning pathways, by enhancing language skills, and giving personalized recommendations that will strengthen the users proficiency level, weaknesses, and learning pace.

The Language Learning App provides a great platform to improve language skills and can have knowledge of different languages with a proper guide, this will expand the skills of users through interactive quizzes and flashcards. This platform will enhance linguistic abilities, users can practice vocabulary, track their progress, monitor their advancements, and will receive customized suggestions for improvements.

Techstack: Spring boot, Spring Data JPA, Thymeleaf, React Native, Node.js, JWT, Cloud Services, Firebase Cloud Messaging, Git

10. Job Search Platform

Develop a Job seeker Job Search Platform that will enable users to search job listings, create profiles, submit applications, and can manage profile management. This application will serve as a platform for communication between job seekers and potential employers, and the application will send users information to the recruiters.

The Job Search Platform will guide the user to search jobs as per their domain and find suitable opportunities by listing the jobs, manage applications, and showcase

their skills and experience. The project will aspire to the job seekers on their career journeys and navigate their career paths with confidence and efficiency.

Techstack: Spring boot, Spring Data JPA, Thymeleaf, React, JWT, MongoDB, Swagger

11. Weather Dashboard

Create a Weather Dashboard that will display the weather conditions and forecast the weather for different locations that will keep users up-to-date with the weather information, help them to be informed with random forecasts changes, and the user can plan accordingly.

The Weather Dashboard will provide a real-time weather information and the user-friendly application that will be a mobile application so that user can be in touch with this application every time and stay informed with the sudden weather updates and upcoming forecasts

Techstack: Spring boot, Spring RestTemplate, Spring Data JPA, Thymeleaf, H2 Database, Weather API, JUnit, JSON

12. Online Auction System

Create an Internet-based Online Auction System that will enable users to post items for bidding and submit bids on listed items, this project will create a dynamic and user-friendly online platform where users can list items they wish to auction and participate in the competitive bidding for those particular items.

The Virtual Auction System provides users with a platform for listing items, setting up auctions, and participating in bidding as well. This will give real-time updates and secure bidding, and the user can see the latest bid and auction status as it opens out. This project will ensure only the authorized users can place bids and participate in auctions.

For any queries, please feel free to visit me in my cabin on the 5th floor, faculty office. I am available in person only, please avoid contacting me via phone or WhatsApp.

Dr.Gokulakrishnan/CSE