

Software Apps Development

A learn by doing project based course
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Modern Software App

End User Devices



FULL STACK DEV



Learn basics for 6 weeks

Practice skills on a real world project for 6 weeks

By the end of this course you will be able to

1. Create software apps

- a. Create frontend for web apps i.e., the UI/UX
 - i. Rendered on Web Browsers that run on Computers and Mobile Devices
 - 1. HTML, CSS, and Bootstrap framework
 - ii. Single page web apps using JavaScript and AJAX
- b. Create server side software for apps
 - i. For the web apps
 - 1. Using python and Flask (a microframework that provides HTTP abstraction)
 - ii. Web APIs for any kind of software app
 - 1. Using python and Flask
- c. Create apps that work on Android and Apple platforms using React Native
- d. Deploy apps on the Heroku cloud platform

By the end of this course you will be able to (Cont.)

1. Create software apps
2. Work on software engineering team to create software apps
 - a. Practice the software engineering skills used in the open source software development
 - i. Use Scrum as the software development process
 - ii. Apply Test first development also known as Test driven development
 - iii. Collaborate on Git and GitHub for the team to manage the software process

Week 1: Git, HTML, CSS

Create your personal website by the end of week 1

Week 2: GitHub, Flask, SQLAlchemy

Create Book Reviews Website
Registration & Auth

Week 3: GitHub, Flask, SQLAlchemy

Book Reviews Website

Search, Book Details, Reviews Feature

Week 4: Web APIs, JavaScript, AJAX

Create Book Reviews Website

Single Page Apps

Week 5, 6: Mobile App with React Native

Create book reviews mobile app

Weeks 7 - 12

Final Project

Course Calendar

All course activities are on Google calendar
Calendar ID is emailed and sent on Gitter

Evaluation, Feedback & Grading

Grade is awarded for project completion

Mentor & Peers engage in App & Code reviews

Issues are created on GitHub

Student acts on the issues to complete the project

Credit Scheme

Web App - 4 Credits

Mobile App - 2 Credits

Cloud Computing - 2 Credits

Project - 4 Credits

Web Apps - Competencies

1. Git, GitHub
2. HTML/CSS
3. Server Side (Flask)
4. Server Side (SQLAlchemy) + DB
5. Testing
6. Web API
7. Single Page Apps

Competency Scale

1. Exemplary = 4
2. Mastery = 3
3. Consolidating = 2
4. Approaching = 1
5. Not yet = 0

Grade	Sum of all Competencies
Ex	28
A+	24
A	22
B+	18
B	16
C	12

Mobile Apps Competencies - To be determined

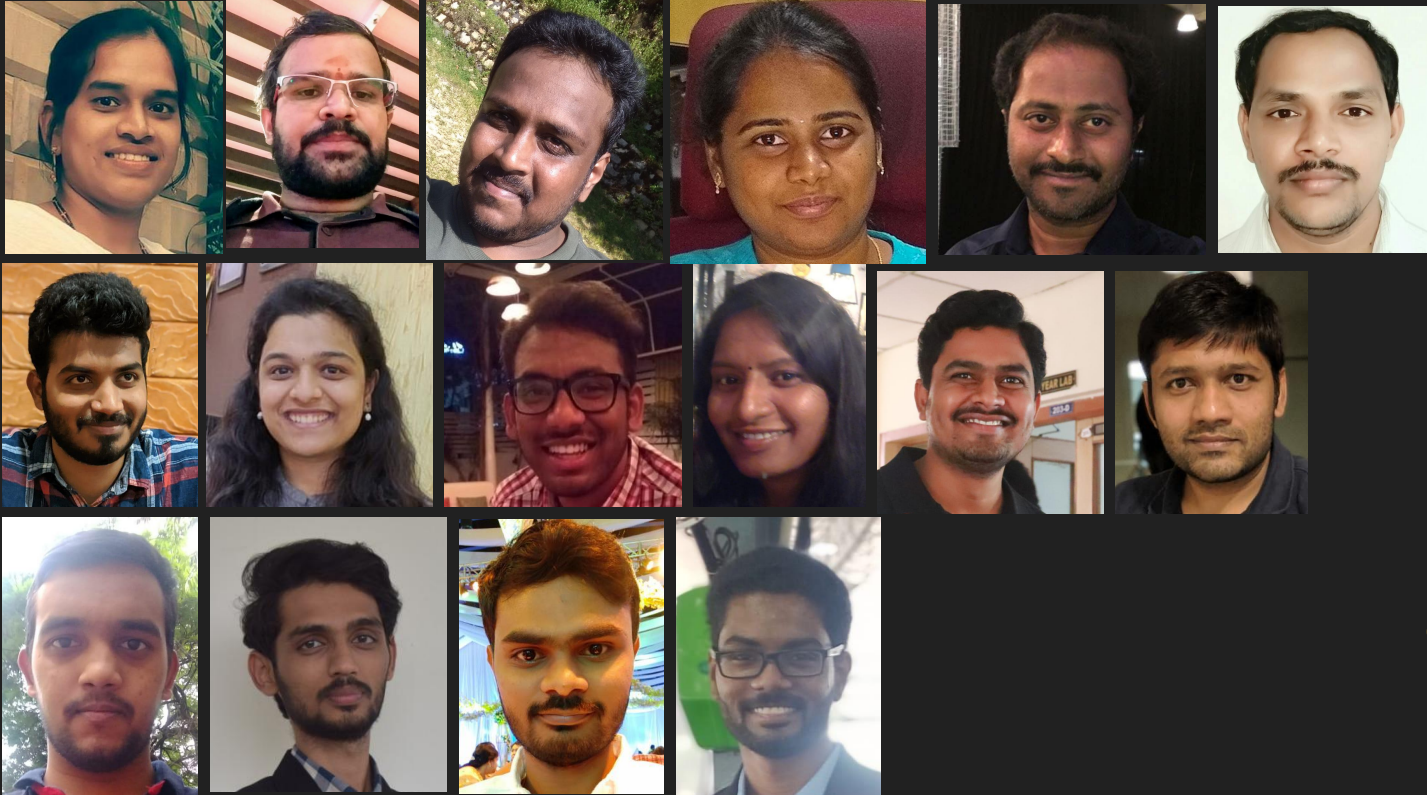
Cloud Computing Competencies - To be determined

Project Grading - To be determined

Continue with CP Batches

Send me a request for change if needed

Mentors/Programming Coaches



**Report
course
issues to
pg@fju.us**