### **Day 1: Introduction and Planning**

## Morning Session

- Welcome and Introduction to the Bootcamp

  <a href="https://docs.google.com/document/d/e/2PACX-1vSWc\_RrSIIJZamInJ6n-KZtJkcgTp">https://docs.google.com/document/d/e/2PACX-1vSWc\_RrSIIJZamInJ6n-KZtJkcgTp</a>

  p-CsaR\_-Kq\_U5ZwzCf-zWU8b6RmaV86KaNiJVUJ5cFadTr88VI/pub
- Overview of the Application Development Lifecycle https://excalidraw.com/#room=c4dd2a4c6381a2e88386,a4bBDzXxDlLuC5-6v6Ofuq
- Project Statement and Wireframe Discussion
- Github Repository: <a href="https://github.com/shrikrishna97/App\_dev\_1\_workshop">https://github.com/shrikrishna97/App\_dev\_1\_workshop</a>

## • Afternoon Session (Hands On)

- Requirement Gathering and framework installation
- Flask Intro Python Beginners documentation
- HTML a tag
- Quickstart Flask Documentation (3.0.x)
- Form controls · Bootstrap v5.0
- https://getbootstrap.com/docs/5.0/getting-started/introduction/
- Install WSL | Microsoft Learn
  - Configurations of the project <a href="https://pvthon-adv-web-apps.readthedocs.io/en/latest/flask.html">https://pvthon-adv-web-apps.readthedocs.io/en/latest/flask.html</a>

### Day 2: Templates Creation/APIs setup

### Morning Session

- Templates creation
- Starting with APIs/Routes, creating basic APIs/Routes for backend

### • Afternoon Session (Hands On)

- Basic template creation like login, signup, user dashboard
- Students creating the APIs/Routes

# Day 3: Designing the Application - Basic Model Creation and Database

- Morning Session
  - Understanding the Models and Database
  - Revising ORM (SQLAlchemy)
  - POST and GET for User (CRUD-1)

# Day 4: Backend Setup - Setting up flask and CRUD

## Morning Session

Resource: Flask Tutorials - YouTube

- Introduction to Backend Development
- Creating CRUD using flask for component 1
- Afternoon Session (Hands On)
  - Students to replicate the same operation on their project
  - One-to-one doubt clearance

## Day 5: Backend Development continued.

- Morning Session
  - Setting up search functionality
- Afternoon Session (Hands On)
  - Students to replicate the same operation on their project
  - One-to-one doubt clearance

### Day 6: Development (Take away session)

- Morning Session
  - Development
- Afternoon Session (Hands On)
  - Hands-on Coding
  - One-to-one doubt clearance

### Day 7: Additional functionalities

- Morning Session
  - Creating CRUD using flask for component and API
- Afternoon Session (Hands On)

- Practical Session: Implementing the features stated above
- One-to-one doubt clearance

## Day 8: Backend Jobs continued

- Morning Session
  - Practical Session: Implementing the remaining

Viva\_prep\_doc: Bootcamp viva prep doc

(Extra resource)

Flask form:

https://python-adv-web-apps.readthedocs.io/en/latest/flask\_forms.html

Chart

js:https://towardsdatascience.com/flask-and-chart-js-tutorial-i-d33e05fba84

- One-to-one doubt clearance
- Afternoon Session (Hands On)
  - Practical Session: Implementing the remaining
  - One-to-one doubt clearance

### Day 9: Buffer day - for remaining topics and mentoring

- Morning Session
  - Practical Session: Implementing the remaining/extra features
  - App dev Project Report Demo
  - One-to-one doubt clearance
  - Preparing for the Final Submission
  - Validity checks
  - Tips for Effective Demonstrations
- Afternoon Session (Hands On)
  - Mad-1 Doc
  - Feedback from Instructors and Peers
  - One-to-one doubt clearance

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