



FOSSEE Summer Fellowship Report

On

Workshop Booking

Submitted by

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Under the guidance of

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Acknowledgement

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Declaration

I declare that this written submission represents my ideas in my own words, and whenever others' ideas or words have been included, I adequately cited and referenced the sources. I declare that I have accurately and adequately acknowledged all sources used in the production of this thesis.

I also declare that I have adhered to all principles of academic honesty and integrity and have not misrepresented or fabricated or falsified any idea/data/fact/-source in my submission. I understand that any violation of the above will be a cause for disciplinary action by the Institute and can also evoke penal action from the sources which have not been appropriately cited or from whom proper permission has not been taken when needed.

Prathamesh Shiralkar

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Chapter 1

Introduction

1.1 Problem Statement

Update and add features to Workshop Booking Platform, the web-based platform to plan and book workshops for Python-FOSSEE.

1.2 Project Objective

The project's objective is to provide a platform to instructors and coordinators and streamline the flow of planning and booking workshops for Python conducted by FOSSEE team at IIT Bombay.

1.3 Project Outcome

The instructors will be able add/modify workshop types and also upload the attachments for the same. The coordinators will be able to propose the workshop for a specific date. Then instructors will be able to book the workshop. Also, admin will be able to update the homepage and other pages with the help of in-built CMS (Content Management System). Some of the workshop data is also available as a REST API that can be consumed by other programs.

1.4 Project Requirements

Following technologies have been used during the development of this project.

- Django (v3.0.5)
- Django-Rest-Framework (v.3.11)
- SQLite3
- Bootstrap (v.4.5)

Chapter 2

Project Overview

2.1 Current System

The current project uses Django v.1.9 , which is not the latest. Also for the front-end, the current Bootstrap v.3.3 is not the latest. Currently, only admin can add/edit workshop types. There is no functionality to comment on a workshop (although a functionality to comment on profiles exists)

Also the data is not available over API.

The homepage of the website is static and can be changed only by changing actual code.

2.2 Proposed Solution

The Django version is updated to v.3.0.5. The bootstrap version is updated to v.4.5. Workshop types can be added and modified by the instructors. Instructors can also upload multiple attachments for workshop types. Instructors and Coordinators can comment on the workshops. Instructors can also add comments that are visible only to other instructors and not to the coordinators.

Limited workshops data is available over REST API.

The platform also has a built-in CMS (Content management System) so that homepage and other page content can be easily changed by admin through the admin panel, without actually editing the code.

Chapter 3

Project Structure

3.1 Overview

This project uses the Python based Django[1] framework (v.3.0.5) as back-end technology. There exist three types of users - Admin, Instructors and Coordinators. The project uses SQLite3[2] as database. The front-end uses Bootstrap[3] 4.5. The pages are rendered by Django using the templating engine. The static files are also served by the Django server itself.

The codebase follows pep8[4] guidelines and conventions.

The Project has 3 basic Django apps :

- Workshop App
- API app
- CMS app

3.2 Workshop App

This app is the heart of the project. This app has all the features for workshop booking. The instructors can add and/or modify workshop types. Multiple attachments can also be uploaded for the workshop types. The coordinators are able to propose the workshop for a specific date. After that instructors can book the workshop. Instructors and coordinators can also comment on the workshop instances to discuss anything as required. Instructors can also post private comments which are visible only to the instructors.

This app also handles the user management tasks like view/edit profile, create account, login, etc.

3.3 API App

This app exposes limited workshops data as a REST API. This app uses Django-REST-Framework[5] to create the API endpoints. Currently there is only one endpoint to GET the workshop details. This can be queried by date range and status.

3.4 CMS app

The CMS (Content Management System) app allows admin to control the homepage and other pages without changing the actual code. The admin can add HTML pages, static files and link HTML pages to routes.

Chapter 4

Screenshots

This chapter has screenshots for the project work carried out.

4.1 Login Page

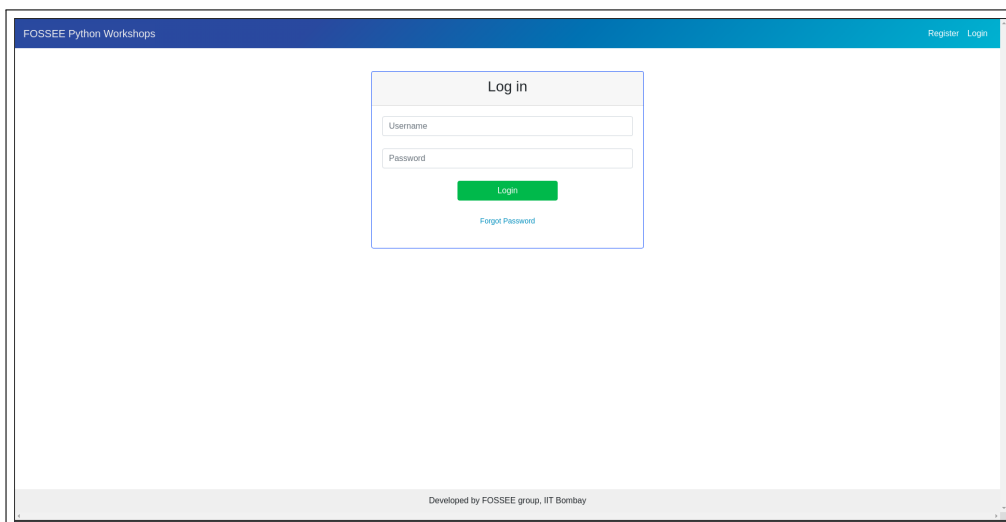


Figure 4.1: Login Page

This is the login page.

4.2 Workshop types

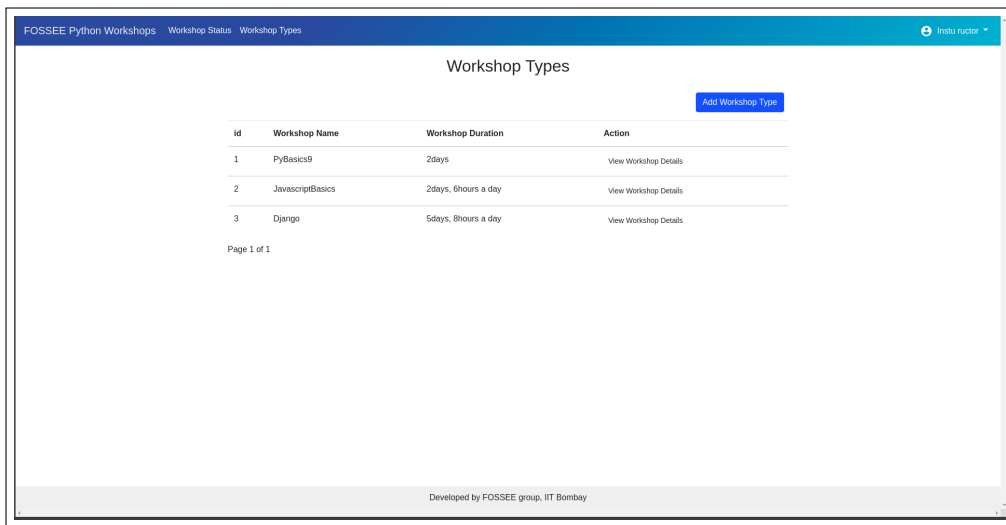


Figure 4.2: View and Add workshop types

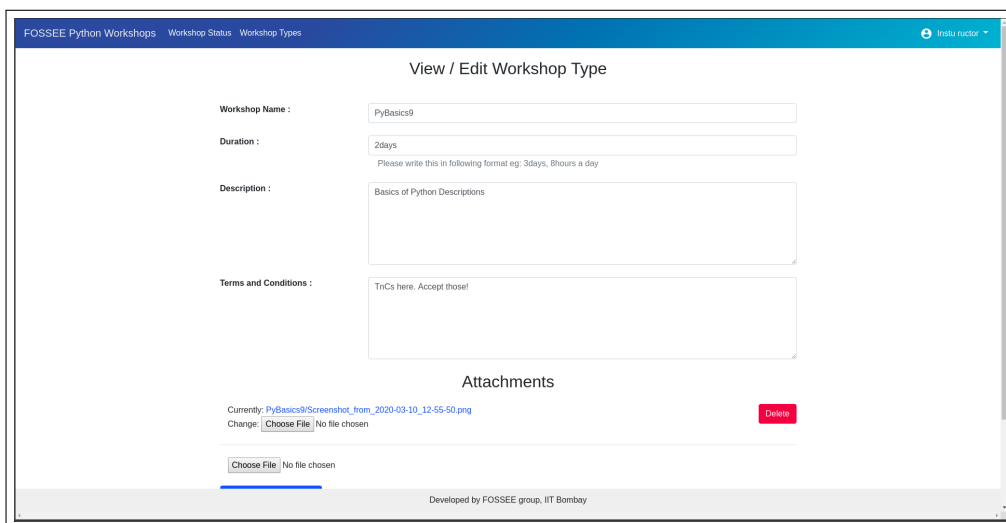


Figure 4.3: Modify workshop types

Users can view the workshop types present. Instructors can also add new workshop types and modify existing ones.

4.3 Propose Workshop

FOSSEE Python Workshops Workshop Status Propose Workshop Workshop Types Coordinator

Please Note: Students have to take a mandatory test before Advanced Python Workshop only those who will clear this test will be eligible to attend the workshop.

Propose Workshop

PyBasics9 2days

08/28/2020

I accept the terms and conditions

Submit

Developed by FOSSEE group, IIT Bombay

Figure 4.4: Propose Workshop Page

4.4 Workshop Comments

Instructor : Instructor

Comments

instructor July 28, 2020, 1:18 a.m.

This workshop seems good, but won't be able to complete in given time!

coordinator July 28, 2020, 1:18 a.m.

Ok, I'll see

Post a comment Public (Non-public comments are visible only to instructors)

Thanks!

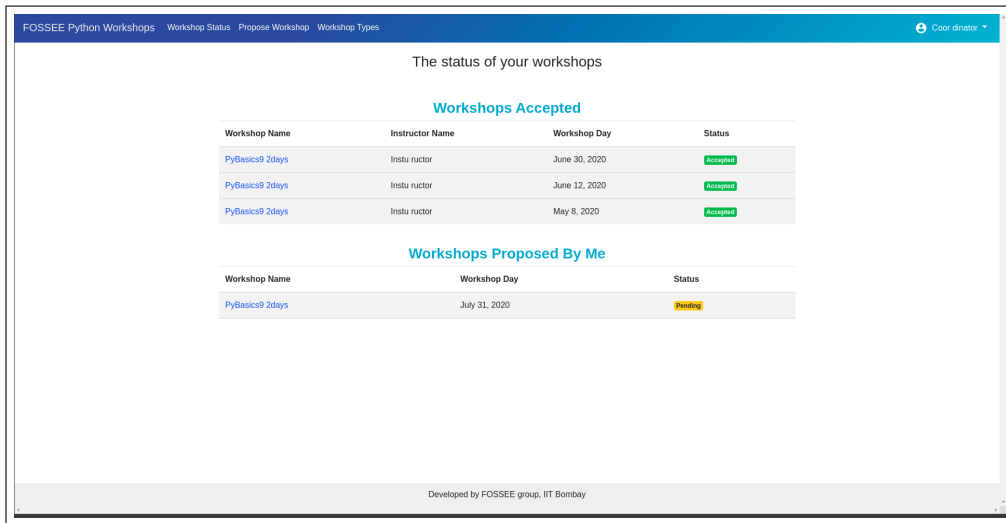
Post

Developed by FOSSEE group, IIT Bombay

Figure 4.5: Workshop Comments

Comments on the workshop instance. Instructors can post private comments.

4.5 Dashboards



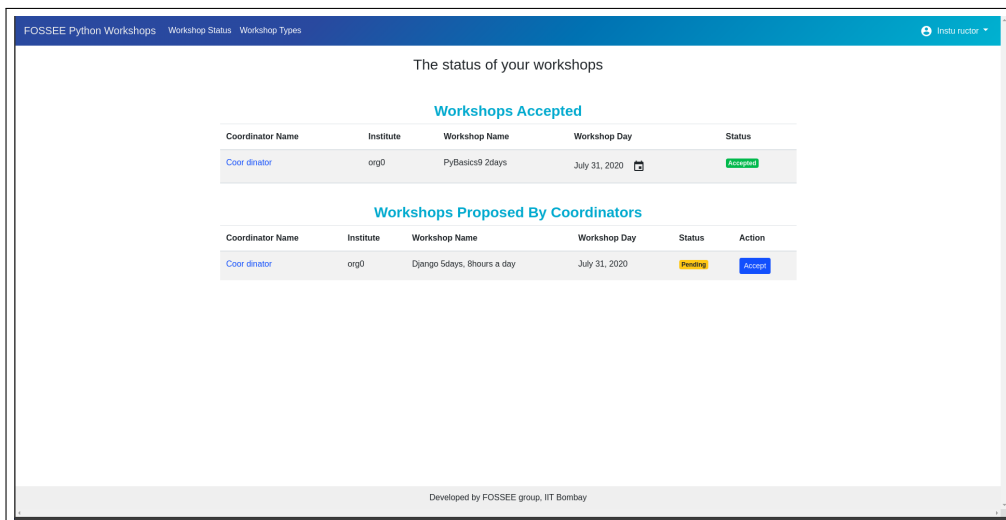
The screenshot shows the Coordinator Dashboard with the following data:

Workshops Accepted			
Workshop Name	Instructor Name	Workshop Day	Status
PyBasics9 2days	Institu ructor	June 30, 2020	Accepted
PyBasics9 2days	Institu ructor	June 12, 2020	Accepted
PyBasics9 2days	Institu ructor	May 8, 2020	Accepted

Workshops Proposed By Me		
Workshop Name	Workshop Day	Status
PyBasics9 2days	July 31, 2020	Pending

Figure 4.6: Coordinator Dashboard

Dashboard for the coordinator. Workshops proposed by the Coordinator appear here.



The screenshot shows the Instructor Dashboard with the following data:

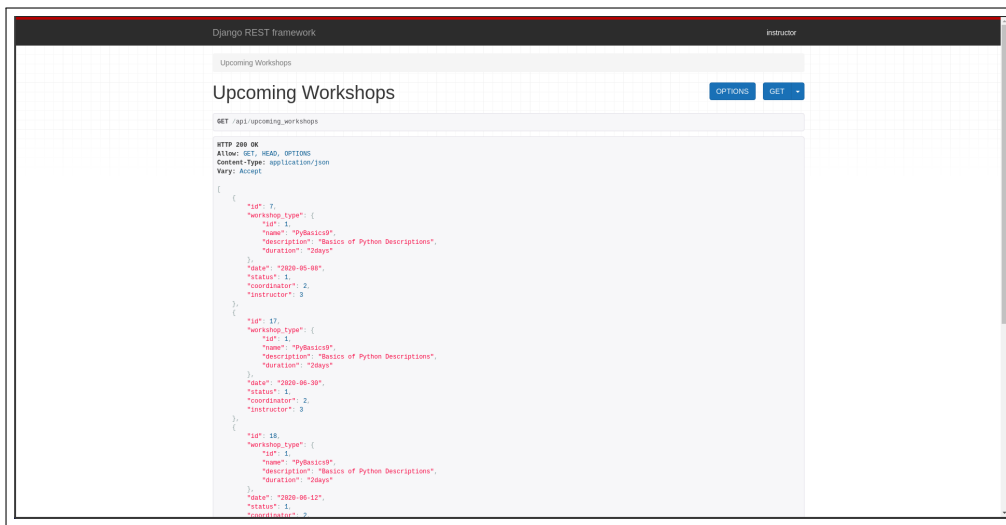
Workshops Accepted				
Coordinator Name	Institute	Workshop Name	Workshop Day	Status
Coor dinator	org0	PyBasics9 2days	July 31, 2020	Accepted

Workshops Proposed By Coordinators					
Coordinator Name	Institute	Workshop Name	Workshop Day	Status	Action
Coor dinator	org0	Django 5days, 8hours a day	July 31, 2020	Pending	Accept

Figure 4.7: Instructor Dashboard

Dashboard for the instructor. Workshops accepted by the Instructor and the ones available for accepting are shown here.

4.6 API Response



The screenshot shows a web interface for 'Upcoming Workshops' in a Django REST Framework. The page title is 'Upcoming Workshops' and it includes 'OPTIONS' and 'GET' buttons. Below the title, the API endpoint is shown as 'GET /api/upcoming_workshops'. The response is a JSON array of three workshop objects. Each object contains fields for 'id', 'workshop_type', 'name', 'description', 'duration', 'date', 'status', 'coordinator', and 'instructor'.

```
HTTP 200 OK
Allow: GET, HEAD, OPTIONS
Content-Type: application/json
Vary: Accept

[
  {
    "id": 7,
    "workshop_type": {
      "id": 1,
      "name": "PyBasicsP",
      "description": "Basics of Python Descriptions",
      "duration": "2days"
    },
    "date": "2020-09-09",
    "status": 1,
    "coordinator": 2,
    "instructor": 3
  },
  {
    "id": 13,
    "workshop_type": {
      "id": 1,
      "name": "PyBasicsP",
      "description": "Basics of Python Descriptions",
      "duration": "2days"
    },
    "date": "2020-09-30",
    "status": 1,
    "coordinator": 2,
    "instructor": 3
  },
  {
    "id": 18,
    "workshop_type": {
      "id": 1,
      "name": "PyBasicsP",
      "description": "Basics of Python Descriptions",
      "duration": "2days"
    },
    "date": "2020-09-12",
    "status": 1,
    "coordinator": 2
  }
]
```

Figure 4.8: Workshops API Response

Currently there is only one endpoint to GET the workshop details. This can be queried by date range and status.

Bibliography

- [1] Django : <https://www.djangoproject.com/>.
- [2] SQLite3 : <https://www.sqlite.org/>.
- [3] Bootstrap : <https://getbootstrap.com/>.
- [4] PEP8 : <https://www.python.org/dev/peps/pep-0008/>.
- [5] Django-REST-Framework : <https://www.django-rest-framework.org/>.