# Crowdfunder

# **Crowdfunding Portal**

# A PROJECT REPORT SUBMITTED IN PARTIAL FULFILMENT OF REQUIREMENT FOR THE AWARD OF THE DEGREE

# MASTER OF COMPUTER APPLICATIONS (MCA)

OF
MAHATMA GANDHI UNIVERSITY, KOTTAYAM
BY

Savia Varghese Reg No: 22PMC149



MAKING COMPLETE

## **Marian College Kuttikanam (Autonomous)**

Peermade, Kerala – 685 531 2022

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#### MAHATMA GANDHI UNIVERSITY, KOTTAYAM

By

Savia Varghese 22PMC149

Under the guidance of

Mr. Satheesh Kumar S
Assistant Professor
PG Department of Computer Applications
Marian College Kuttikkanam Autonomous



MAKING COMPLETE

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Peermade, Kerala – 685 531

2022

# PG DEPARTMENT OF COMPUTER APPLICATIONS

## Marian College Kuttikkanam(Autonomous)

MAHATMA GANDHI UNIVERSITY, KOTTAYAM KUTTIKKANAM – 685 531, KERALA.

# **CERTIFICATE**

This is to certify that the project work entitled

#### Crowdfunder

is a bonafide record of work done by

# Savia Varghese

**Reg.No: 22PMC149** 

In partial fulfillment of the requirements for the award of Degree of

## MASTER OF COMPUTER APPLICATIONS [MCA]

During the academic year 2022-2023

Mr. Satheesh Kumar S
Assistant Professor
PG Department of Computer Applications
Marian College Kuttikkanam Autonomous

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**External Examiner** 

**External Examiner** 

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Finally, I express my deep appreciation to all my friends and family members for the moral support and encouragement they have given to complete this project work successfully.

#### **SAVIA VARGHESE**

#### **ABSTRACT**

The Crowdfunding Portal is a web-based application that aims to foster a community-driven approach to funding projects across diverse categories. *Crowdfunder* is developed as a donation-based crowdfunding portal by providing a user-friendly platform for individuals and organizations to seek financial support. It is administered by an administrator who adds projects, categories, and corresponding donation amounts. The projects can be searched by the user and fall under different categories. Registered users can access the portal and make donations through secure payments thus encouraging social sharing and engagement. Users can share details of the projects they support with others, spreading awareness and potentially attracting more donors. Hence, the crowdfunding platform aims to provide financial assistance for uploaded projects with potential donors who are interested in contributing to specific causes.

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#### 1.1 PROBLEM STATEMENT

The current problem addressed is the lack of accessible and efficient platforms for individuals and organizations to raise funds for their projects, causes, and initiatives. Traditional fundraising methods often come with significant barriers such as limited reach as localized fundraising efforts often fail to attract attention and financial contributions from individuals and organizations, less awareness, and public concerns about the transparency and legitimacy of fundraising initiatives due to the lack of a trusted platform or centralized system it is difficult for individuals to confidently contribute to projects, hindering potential beneficiaries from obtaining the necessary financial support.

#### 1.2 PROPOSED SYSTEM

- The Django project for a crowdfunding portal is developed with the objective to effectively and efficiently raise funds for projects from the public who likes to donate for the wellness of the needy.
- Develop a very simplified and user-friendly web application for seeking financial assistance.
- The project details and target amount will be added by the admin category-wise.
- The projects uploaded will be of social relevance and categorized specifically so that users can donate to projects aligned with their interests and values.
- Registered users can donate an amount as their contribution to reach the target amount of the project and can view it in the contributions log.

#### 1.3 FEATURES OF THE PROPOSED SYSTEM

The features of this website are:

- Responsive website design.
- The system avoids redundancy through the use of several types of validation.
- User-Friendly navigation.
- Facility for the user to view the contributions made by them.

# 2. FUNCTIONAL REQUIREMENTS

#### **FUNCTIONAL REQUIREMENTS**

The functional requirements for this website include:

- *Login and Signup*: The user needs to register themselves to use the application. After logging in, the user will be redirected to the page where projects are listed. The details provided at the login time will be used for donation.
- **Project listing**: The user can view all the projects, descriptions, and target amounts that are uploaded by the admin on the application.
- *Category*: Projects are categorized by admin based on their nature or purpose into different categories, allowing users to explore and filter projects based on their interests.
- **Search for projects**: The user can search for the projects using keywords and the results will be given as the most approximate to the user's search.
- **Projects viewed by category**: By choosing a category, the user can view the projects that fall under that category.
- **Donation**: Registered users can browse through the available projects and select the one they wish to donate.
- *Contribution logs:* After a donation is made, the log will show the project title, contributor name, the amount contributed, target amount, and timestamp of the contribution.
- **Payment:** The portal provides a secure payment gateway that facilitates users to donate their desired amount to the chosen project.

# 3. NON-FUNCTIONAL REQUIREMENTS

### NON-FUNCTIONAL REQUIREMENTS

The non-functional requirements for this website are:

- *Usability*: The proposed website is simple, provides easy navigation to various functionalities.
- *Maintainability*: The mean time to restore the system (MTTRS) following a system failure must not be greater than 10 minutes.
- Availability: Describes how likely the system is accessible to a user at a given point in time. In the event that the database is corrupted or the hardware fails, a replacement page will appear. Additionally, a database backup should be kept in case of hardware failure or database corruption.
- **Security**: The database should be backed up every hour. Under failure, system should be able to come back at normal operation under an hour. All data must be stored, protected, or protectively marked.

# 4. FEATURES AND HIGHLIGHTS

#### FEATURES AND HIGHLIGHTS

The features and highlights of this project are:

- Login and Registration: Individuals interested in donating to the projects can register themselves in order to access the portal and later use the credentials to log in. Then the user will be redirected to the page where projects are listed.
- *Add Projects*: The admin adds projects to the portal along with relevant details such as project title, description, images, and target donation amounts.
- *Add Category:* The admin adds categories so that projects can be categorized under them, allowing users to explore and filter projects based on their interests.
- *Project listing:* The user can view all the projects uploaded in the website along with relevant details such as project title, description, images, and target donation amounts.
- **Projects viewed by category:** By choosing a category, the user can view the projects that fall under that category.
- **Search for projects:** The user can search for projects in the portal using keywords and the results given will be the most accurate project related to the user's search.
- **Donation:** Registered users can browse through the available projects and select the one they wish to donate which redirects to a donation page with the project name, target amount, user details and the user can enter an amount to donate.
- *Contribution logs:* After a donation is made, the log will show the project title, contributor name, the amount contributed, target amount, and timestamp of the contribution made.
- **Payment**: The portal provides a secure payment gateway that allows users to donate their desired amount to the chosen project.



#### THIRD-PARTY LIBRARIES

Third-party applications and libraries in Django are pre-built components or packages developed by the community or other companies that you can use to extend the functionality of your Django projects.

It can be installed using package managers like pip, and they usually come with their own documentation and examples to guide developers in their usage. These libraries can cover a wide range of functionalities. The third-party libraries used in my project are:

The third-party libraries used in this project are:

- *Django pillow:* The Python Imaging Library adds image processing capabilities to your Python interpreter. This library provides extensive file format support, an efficient internal representation, and fairly powerful image processing capabilities. The core image library is designed for fast access to data stored in a few basic pixel formats. It should provide a solid foundation for a general image processing tool.
- *Django jazzmin:* Django jazzmin is a third-party library for Django that provides an improved admin interface. It is a modern, responsive, and customizable replacement for Django's default admin interface, a drop-in app to jazz up your Django admin site, with plenty of things you can easily customize, including a built-in UI customizer.
- **Bootstrap:** Bootstrap is the most popular CSS Framework for developing responsive and mobile-first websites.



#### **DATABASE DESIGN**

The main objectives behind database designing are to produce physical and logical design models of the proposed database system. Data management involves creating, modifying, deleting and adding data in files and using this data to generate reports. A well-designed database is essential to guarantee information consistency, eliminate redundant data, efficiently execute queries, and improve the database's performance. The reliability of data depends on the table structure, whereas creating primary and unique keys guarantees uniformity in the stored information.

#### **CATEGORY TABLE**

```
class Category(models.Model):
   name = models.CharField(max_length=50)
   description = models.TextField()
   image=models.ImageField(null=True)
```

#### **PROJECT TABLE**

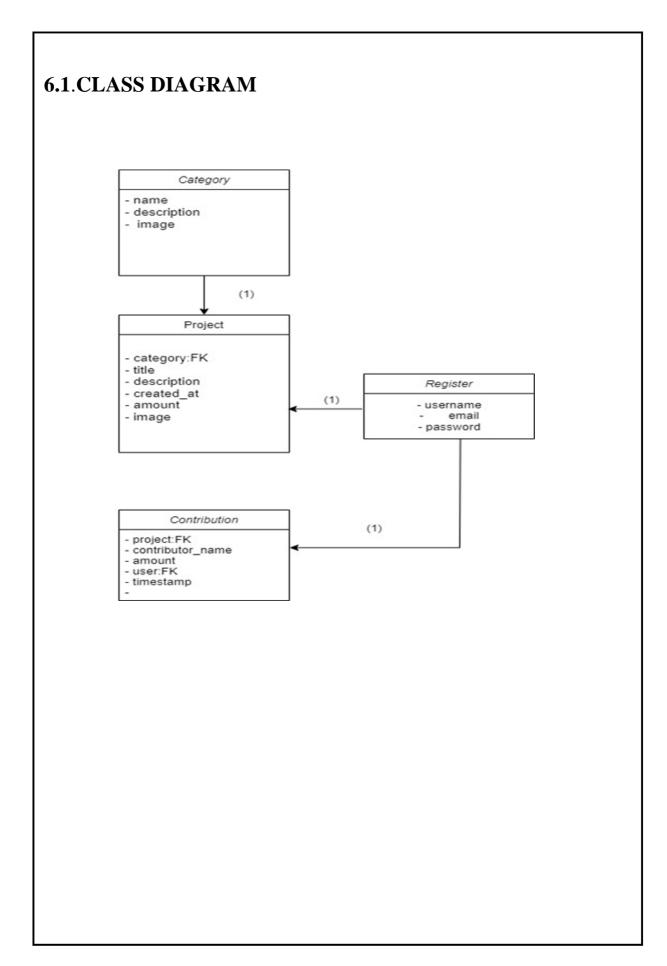
```
class Project(models.Model):
    title = models.CharField(max_length=255,null=True)
    description = models.TextField(max_length=255,null=True)
    created_at = models.DateTimeField(auto_now_add=True,null=True)
    amount = models.DecimalField(max_digits=10, decimal_places=2,default=True, null=True)
    image = models.ImageField(upload_to="images", height_field=None,default=True, null=True)
    category = models.ForeignKey(Category, on_delete=models.CASCADE)
```

#### **CONTRIBUTION TABLE**

```
class Contribution(models.Model):
    project = models.ForeignKey(Project, on_delete=models.CASCADE)
    contributor_name = models.CharField(max_length=255)
    amount = models.DecimalField(max_digits=10, decimal_places=2)
    user=models.ForeignKey(register,on_delete=models.CASCADE,null=True)
    timestamp = models.DateTimeField(auto_now_add=True)
```

#### **REGISTER TABLE**

```
class register(models.Model):
    username=models.CharField(max_length=255)
    email=models.EmailField(max_length=255)
    password=models.CharField(max_length=255)
```



#### **CHALLENGES FACED**

I was confused about integrating my concept into Django and the process flow of the project. Efforts were taken to refer to a lot of crowdfunding websites to conceptualize the topic. I had to spend a lot of time learning about pushing the data from the Django admin because it was new to me. I had problems with the virtual environment residing in my project lead to dysfunctionality and resulted in unexpected errors. My project had to be restarted at that moment. While implementing the bootstrap templates in Django using CSS and JS files, they appeared to be quite difficult and generated errors.

# 8.FUTURE ENHANCEMENTS

#### **FUTURE ENHANCEMENTS**

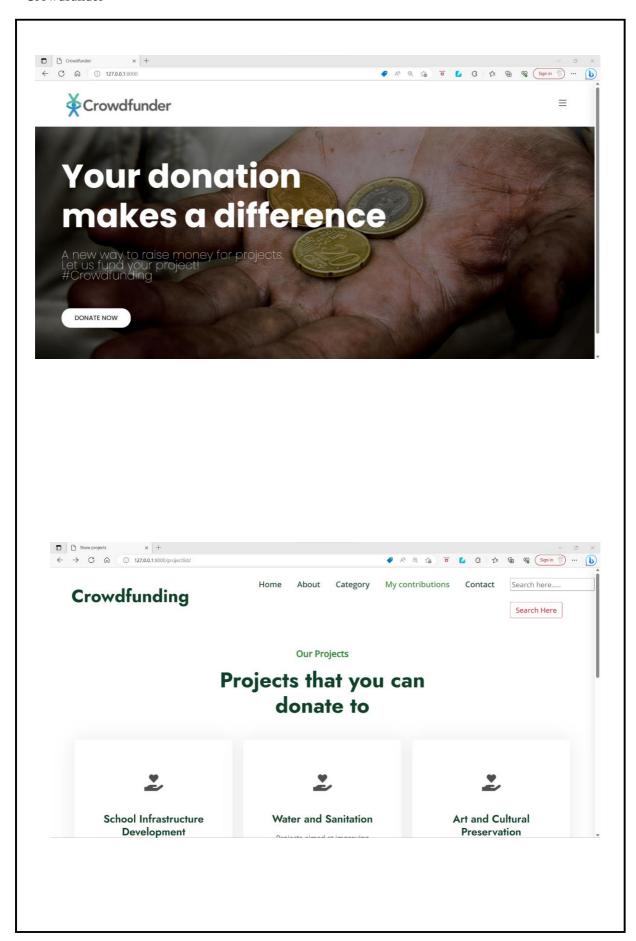
- 1. Social Integration: Integrate social media platforms to enable users to share their supported projects and attract more donors.
- 2. Project Updates: Providing more detailed updates to donors about the progress and milestones of the projects they have supported. Include visual representations, such as graphs or charts, to showcase the impact of donations & foster transparency.
- 3. Campaigns: To conduct campaigns encompassing strategic efforts to promote and raise funds for the projects and the campaign's duration can vary based on the project's needs.

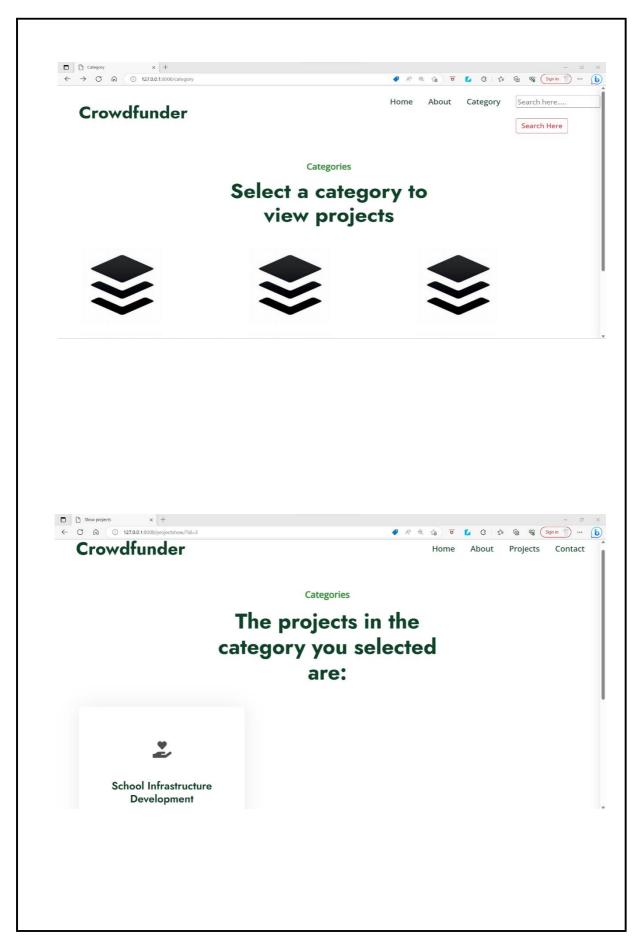
## **CONCLUSION**

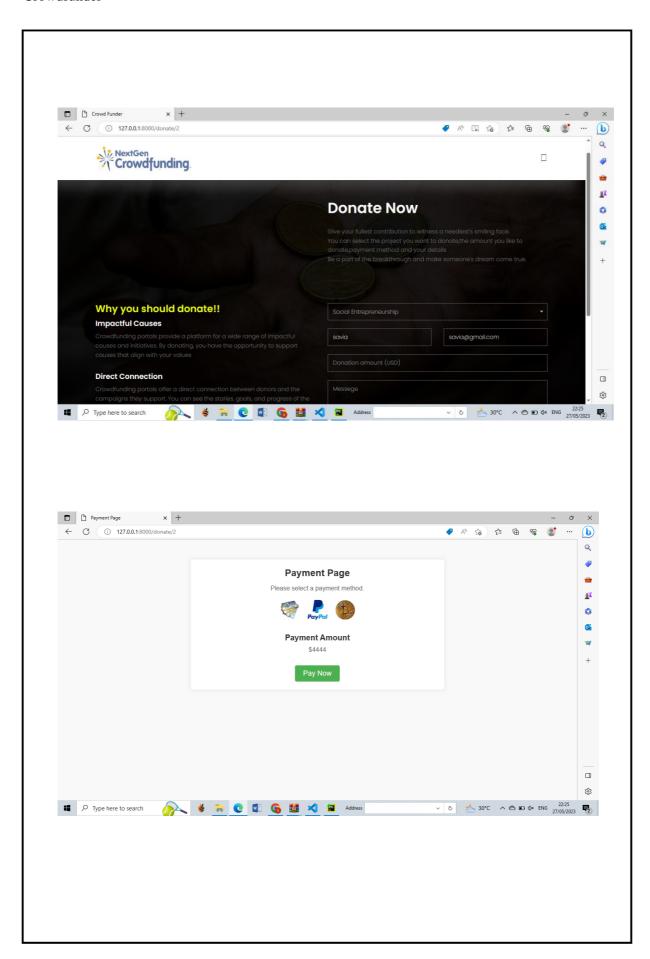
To conclude, Crowdfunding Portal serves as a powerful platform for connecting individuals and organizations seeking financial support with potential donors who are interested in contributing to specific projects. The portal facilitates the donation payment process and displays contribution logs. With project listings and categorized projects, the crowdfunding portal offers an intuitive interface for users to explore, select, and donate to projects aligned with their interests and values. The admin can add projects that are of relevant causes that need funding. This web application can provide a dynamic and empowering environment for individuals to donate to projects, receive financial support, and make a meaningful impact in their respective fields.

## **REFERENCES**

- ✓ <a href="https://codecanyon.net/item/fundorex-crowdfunding-platform/33286096">https://codecanyon.net/item/fundorex-crowdfunding-platform/33286096</a>
- ✓ <a href="https://docs.djangoproject.com/en/4.2/">https://docs.djangoproject.com/en/4.2/</a>
- ✓ <a href="https://bootstrapmade.com/">https://bootstrapmade.com/</a>
- ✓ <a href="https://themewagon.com/">https://themewagon.com/</a>







#### Crowdfunder

