Kristy Gray

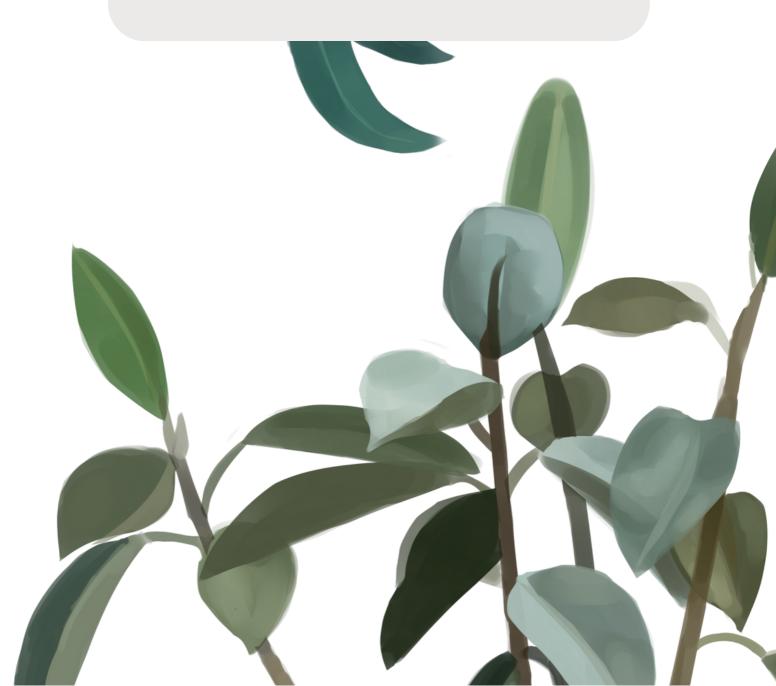# MVP Plan

DRF Project
Submission Part 1 of 3

SHE{CODES} Plus

Project: Crowdfunding

Project Description

Kickstarter, Go Fund Me, Kiva, Change.org, Patreon... All of these different websites have something in common: they provide a platform for people to fund projects that they believe in, but they all have a slightly different approach. You are going to create your own crowdfunding website, and put your own spin on it!

Project Requirements

Your crowdfunding project must:

- ✓ Be separated into two distinct projects: an API built using the Django Rest Framework and a website built using React.
- ✓ Have a cool name, bonus points[1] if it includes a pun and/or missing vowels. See https://namelix.com/ for inspiration.
- ✓ Have a clear target audience.
- ✓ Have user accounts. A user should have at least the following attributes:
    - ✓ Username
    - ✓ Email address
    - ✓ Password
- ✓ Ability to create a "project" to be crowdfunded which will include at least the following attributes:
    - ✓ Title
    - ✓ Owner (a user)
    - ✓ Description
    - ✓ Image
    - ✓ Target amount to fundraise
    - ✓ Whether it is currently open to accepting new supporters or not
    - ✓ When the project was created
- ✓ Ability to "pledge" to a project. A pledge should include at least the following attributes:
    - ✓ An amount
    - ✓ The project the pledge is for
    - ✓ The supporter/user (i.e. who created the pledge)
    - ✓ Whether the pledge is anonymous or not
    - ✓ A comment to go along with the pledge
- ✓ Implement suitable update/delete functionality, e.g. should a project owner be allowed to update a project description?
- ✓ Implement suitable permissions, e.g. who is allowed to delete a pledge?
- ✓ Return the relevant status codes for both successful and unsuccessful requests to the API.
- ✓ Handle failed requests gracefully (e.g. you should have a custom 404 page rather than the default error page).
- ✓ Use Token Authentication.
- ☐ Implement responsive design.

Additional Notes

No additional libraries or frameworks, other than what we use in class, are allowed unless approved by the Lead Mentor.

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[1] Bonus points are meaningless.

Project Submission Details

Note that while this is a crowdfunding website, actual money transactions are out of scope for this project.

MVP Plan Submission

Please submit the following:

- ✓ The title of your website.
- ✓ A paragraph detailing the purpose and target audience for your website.
- ✓ The features your MVP will include.
- ✓ At least 3 additional features you would like to include if you reach your MVP.
- ✓ An API specification.
- ✓ A database schema.
- ☐ Wireframes. **mood-board instead**
- ✓ Colour Scheme.
- ☐ Heading and body font(s). **mood-board instead**

Part A Submission

Please submit the following:

- ☐ A link to the GitHub repository containing the code for your project.
- ☐ A link to the deployed project.
- ☐ A screenshot of Insomnia, demonstrating a successful GET method for any endpoint.
- ☐ A screenshot of Insomnia, demonstrating a successful POST method for any endpoint.
- ☐ A screenshot of Insomnia, demonstrating a token being returned.
- ☐ Step by step instructions for how to register a new user and create a new project (i.e. endpoints and body data).
- ☐ Your refined API specification and Database Schema.

Part B Submission

Please submit the following:

- ☐ A link to the GitHub repository containing the code for your project.
- ☐ A link to the deployed project.
- ☐ A screenshot of the home page.
- ☐ A screenshot of the project creation form.
- ☐ A screenshot of a project with pledges.
- ☐ A screenshot of the resulting page when an unauthorized user attempts to edit a project.

Conceptual Plans

Ideas Brainstorm

School Books for kids

Families and schools can ask for school books for those who cannot afford them.

Similar to: Smith Family

Tutoring Hours Donation

Families and Schools can request help with online tutoring hours

Similar to: Tutors for change

Homeless Helper

Supporters can pre-purchase food and supplies from local businesses, to be distributed to the homeless by the businesses

Similar to: Pay it Forward

Communitree

Support the WA Urban Forest strategies by pledging $, volunteer hours, plants, trees and expertise.

Local Governments, schools and environmental organisations can use these resources to support their individual Urban Forest strategy plans. These include community, busy bees, planting events etc

Idea selected

Battle Big Companies

Request donations to help people fight big companies who establish developments that negatively impact the environment

Similar to: edo.org.au

Superhero Funding

B grade local superheroes looking to kick start their career

Communitree Project Research

- https://www.wa.gov.au/government/document-collections/better-urban-forest-planning-perth-and-peel

- https://www.202020vision.com.au/media/41948/urban-forest-strategy-workbook.pdf

- https://www.victoriapark.wa.gov.au/Around-town/Environment/Urban-Forest-Strategy

- https://treecitiesoftheworld.org/resources.cfm

- https://treecitiesoftheworld.org/documents/benefits-of-trees.pdf

- https://southperth.wa.gov.au/docs/default-source/5-future/our-environment/urban-forest/urban-forest-strategy.pdf?sfvrsn=8245c3bd_4

- https://southperth.wa.gov.au/our-future/our-environment/urban-forest#:~:text=A%20healthy%20urban%20forest%20is,tree%20cover%20in%20the%20City

Good afternoon Deniqua and Penny,

I am a resident and home-owner in the Town of Victoria Park and participate in the Urban Forest at Home Program. I take pride in my property, my plants/garden, our town's urban canopy, and the environment.

My interest in the Urban Forest Project has resulted in me exploring ways to expand community contributions & engagement.

Could you please provide a little insight to help me understand how WA Towns/Local Governments receive the resources needed for their Urban Forest Strategies and the associated rules?

In VP, trees and plants are freely available to residents to plant on their property or their verge (Town Property). I'd like to know:

1. Where do these plants/trees come from?
2. Are they donated by businesses, paid for by funding, etc.?
3. If someone wanted to donate money or physical stock for the urban forest strategy/street trees etc., is this possible? If so, what is the process?
4. If someone wanted to donate time, volunteer themselves or contribute to this cause (regardless of the town they reside in), what is the process?

The reason for my questions is that I am currently participating in a program that requires me to develop a website/project that focuses on crowdfunding/donations / volunteering for a cause. I want the focus to be on people donating plants, funds, volunteering time, expertise etc., to local governments and their urban forestation projects.

The project is for educational purposes within the course, but I would like to launch it in the real world if it is tangible.

Any help, advice or insight on what is currently set up within the government systems and would be tangible would be very helpful.

Thank you so much for your time,

Kind Regards,

Kristy Gray

Email to Town of Victoria Park Urban Forest Project Team 12/01/2023

Communitree

Welcome to Communitree, where tree-huggers gather to make a real impact on the urban forest of their community.

Local Governments, schools and environmental organisations can create projects to raise funds for community busy bees and planting days/events. Supporters can pledge resources to help these projects.

Audience:

- **Project Starters:** local governments, schools, and environmental organisations
- **S**upporters: individuals, local residents, businesses, organisations

Support:

- monetary
  - donate any amount or per tree/plant (eg: $2 per plant)
- physical trees, shrubs, plants
- volunteer hours for busy bee
- professional services/expertise

Funded Indicator:

- Achieve set goal required for a community planting event:
  - X dollars (equating to X trees)
  - X volunteer hours
  - X gardeners
  - X trees

Vibe:

- Natural, minimal, elegant

Paint our town green

Voluntree

Paint the town green

Communitree

Tree-Huggers

Communitree-huggers

Canopy Community

(Urban) Forest Friends

Horto Helpers

Bush Buddies

Back End Plans

Project General User Functions

Project Organiser

Supporter

User

Project Organiser:
- create
- update
- view
- make inactive
- login / logout
- get token

Supporter:
- create
- update
- view
- make inactive
- login / logout
- get token

Project

Project Organiser:
- create
- update
- view
- end
- delete
- comment

Supporter:
- view
- pledge
- comment
- favourite / follow

Pledges

Project Organiser:
- create
- update
- view
- delete

Supporter:
- create
- update
- view
- delete

Funded

Project Organiser:
- receive pledges
- view history
- send funded message
- close project

Supporter:
- make payment
- receive funded message
- comment

Project Features

Critical {MVP}

Nice to Have

Project
- Create
  - Title
  - Owner (a user)
  - Description
  - Image
  - Target Amount to Fundraise
  - Open/Close (Accepting new supporters)
  - When was the project created
- Retrieve
  - List of Projects
  - Detailed View of Specific Project
- Update
  - everything except creation date
- Destroy

Pledge
- Create
  - An amount
  - The project the pledge is for
  - The supporter
  - Whether the pledge is anonymous
  - A comment to go with the pledge
- Retrieve
  - List of pledges
  - Detailed View of Specific pledge
- Update
- Destroy

User
- Create
  - Username
  - Email Address
  - Password
- Retrieve
  - List of users
  - Detailed View of Specific user
- Update
- Destroy
- Change Password
- Get Token

Project
- sum of pledges
- goal bolance
- funding status
- filter list of projects
- end date

Pledges
- volunteer hours
- gardeners
- tree donations
- filter list of pledges

User
- avatar
- bio
- list of pledges
- list of projects
- list of comments
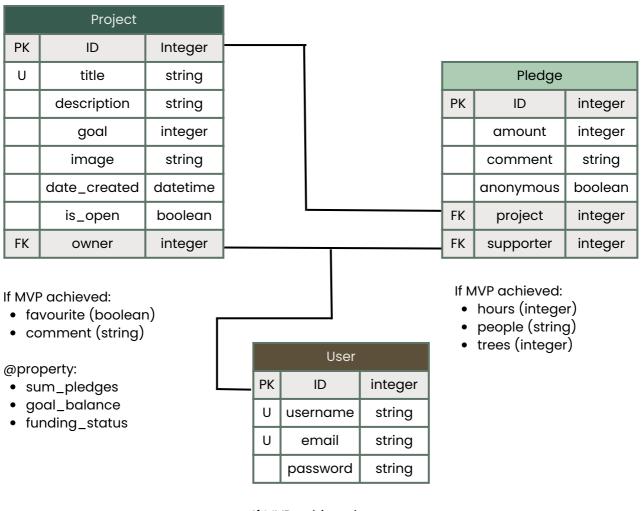- list of favourites

Comments
- Create
  - Body
- Retrieve
  - List of comments
- Update
- Destroy

Favourite
- Create
- Retrieve
  - list of favourites
- Update
- Destroy

Project Database Schema (MVP only)

PK: Primary Key | U: Unique | FK: Foreign Key

Project

PK	ID	Integer
U	title	string
	description	string
	goal	integer
	image	string
	date_created	datetime
	is_open	boolean
FK	owner	integer

If MVP achieved:
- favourite (boolean)
- comment (string)

@property:
- sum_pledges
- goal_balance
- funding_status

Pledge

PK	ID	integer
	amount	integer
	comment	string
	anonymous	boolean
FK	project	integer
FK	supporter	integer

If MVP achieved:
- hours (integer)
- people (string)
- trees (integer)

User

PK	ID	integer
U	username	string
U	email	string
	password	string

If MVP achieved:
- bio (string)
- avatar (string)
- first name (string)
- last name (string)
- is_active (boolean)

Project API Specification (MVP)

HTTP Method	URL	Purpose	Request Body	Successful Response Code	Auth
GET	/projects/	Returns all projects.		200	N/A

POST	/projects/	Create a new project.	{
			"title": "First Project",
			"description": "This is a project",
			"goal": 10,
			"image": "http://image.jpg",
			"is_open": true,
			"date_created": "2023-01-29T09:50:24.154Z"
			}
				201	Logged In

GET	/projects/1/	Returns the project with ID of "1".		200	N/A

PUT	/projects/1/	Updates the project with ID of "1".	{
			"title": "First Project",
			"description": "This is a project",
			"goal": 10,
			"image": "http://image.jpg",
			"is_open": true
			}
				200	Logged In Project Owner

POST	/pledges/	Create a new pledge.	{ "amount": 50, "comment": "Good luck!", "anonymous": false, "project": "Bananas" }'	201	Logged In Pledge Owner

GET	/pledges/1/	Get the pledge with ID of "1".	{
			"amount": 10,
			"comment": "I have a dog",
			"anonymous": false,
			"project": "project title",
			"supporter": "username"
			}
				200	N/A

DELETE	/pledges/1/	Deletes the pledge with ID of "1".		200	Logged In Pledge Owner

PUT	/pledges/1/	Updates the pledge with ID of "1"	{
			"comment": "I have a dog",
			"anonymous": false,
			"project": "project title"
			}
				200	Logged In Pledge Owner

GET	/users/	Returns all users.		200	N/A

POST	/users/	Create a new user	{
			"username": "exampleuser",
			"email": "example@example.com",
			"password":"passwordthingy",
			"bio":"Insert bio",
			"avatar":"https://image.jpg"
			}
				201	N/A

PUT	/users/2/	Updates the user with ID of "2".	{
			"username": "exampleuser",
			"email": "example@example.com",
			"is_active":true,
			"bio":"Insert bio",
			"avatar":"https://image.jpg"
			}
				200	Logged In user

POST	/api-token-auth/	creates token	{
			"username": "<insert_unique_username>",
			"password": "<insert_password>"
			}
				201	N/A

PUT	/users/change-password/	changes password	{
			"old_password": "thisoldpassword",
			"new_password": "thisnewpassword"
			}
				200	Logged In user

Project User Flow

https://tinyurl.com/kg-drf-mvp-userflow

See Also:
https://github.com/SheCodesAus/she-codes-crowdfunding-api-project-Ms-KL/tree/main/project_submission/MVP%20Submission

Front End Plans

Draft Copy for Website

Project Owners:

As a local government, school, or environmental organization, you play a crucial role in shaping your community's urban forest. The WA Urban Forest strategies provide an opportunity for you to positively impact your city's health, beauty and sustainability.

Achieve your urban forest goals with help from community members. Register and create a project on this website to gain access to resources such as financial pledges, volunteer hours, plants, trees and expertise.

Let's work together to create a greener, healthier future for all.

Supporters:

As a member of the community, you have the power to make a real impact on your city's urban forest. By registering and contributing to this website, you can support local governments, schools, and environmental organizations in achieving their individual urban forest strategy plans.

Your generosity in the form of financial pledges, volunteer hours, plants, trees, and expertise can help create a greener, healthier future for all.

Let's work together to shape the urban forest of our community."

Summary:

Welcome to Communitree, where together we can make a real impact on the urban forest of our community.

Local governments, schools, and environmental organizations play a crucial role in shaping the urban forest, and with the WA Urban Forest strategies, they have the opportunity to make a real impact on the health, beauty, and sustainability of their city.

By registering and contributing on this website, both organizations and community members can access resources such as financial pledges, volunteer hours, plants, trees and expertise to achieve their individual urban forest strategy plans. Let's work together to create a greener, healthier future for all.

Project Mood Board

Natural, minimal, elegant

Eucalyptus leaves

Australian native flora

scandinavian