

Put It In Park



Picture from: <http://geology.isu.edu>

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Table of Contents

1	Motivation	3
2	User Stories.....	3
2.1	User Story 1	3
2.2	User Story 2	3
2.3	User Story 3	3
2.4	User Story 4	3
2.5	User Story 5	3
3	RESTful API	3
4	Models	4
4.1	National Parks.....	4
4.1.1	Examples of filtered/sorted attributes.....	4
4.1.2	Examples of searchable attributes	4
4.2	Recreational Activities.....	4
4.2.1	Examples of filtered/sorted attributes.....	4
4.2.2	Examples of searchable attributes	5
4.3	States.....	5
4.3.1	Examples of filtered/sorted attributes.....	5
4.3.2	Examples of searchable attributes	5
5	Tools.....	5
6	Hosting.....	6

1 Motivation

This project aims to encourage Americans and tourists to go outdoors by highlighting National Parks and recreational activities in their area. This would serve to promote physical fitness and increase awareness of all that national parks have to offer. In doing this, we hope to answer three questions:

- 1.) What outdoor activities can the user participate in throughout their area?
- 2.) Is there a correlation between accessibility to outdoor parks/recreation and physical activity?
- 3.) Has American visitation of national parks/participation in outdoor activities changed in recent years?

2 User Stories

Customers of Put It In Park have requested these features listed.

2.1 User Story 1

Include a description within the splash or “Home” page.

2.2 User Story 2

Include profile pictures, commits, and issues of each team member within the “About” page.

2.3 User Story 3

Structure our models in grid or table form for each of their respective pages.

2.4 User Story 4

Include a link to our API documentation designed by Postman. Our API should be capable of returning a list of models, returning attributes of the instances, and returning detailed list of models.

2.5 User Story 5

Design our instance pages as stated. Three instance pages per each of the three models, five attributes from the model page, and one instance-specific media.

3 RESTful API

APIs currently utilized:

- National Park Service (NPS) API - Used to pull information about national parks.
- GitLab API - Used to pull members’ profile pictures, amount of commits, and amount of issues.
- Recreation Information Database (RIDB) API - Used to pull information about recreational activities.
- Center for Disease Control - Chronic Data API - Used to pull information about health varying by state.

Our API (PINP API):

Postman documentation: <https://documenter.getpostman.com/view/9011044/SVtR19mz>

Base URL: api.putitinpark.xyz/

- Requests of models return a list of all parks/recreation/states depending on the URL specified in the request
- Requests of instances return specified park/recreation/state given respective id's as a parameter.
- Requests of models specifying a park/recreation/state id return a list of instances of that model that offer or exist in that park/recreation/state.

4 Models

4.1 National Parks

The model "National Parks" represents the 61 parks throughout the United States. This model connects to the "States" model as location plays a large part in park visitation, and it connects to the "Recreational Activities" model as National Parks often include outdoor recreation.

4.1.1 Examples of filtered/sorted attributes

- 1.) Name
- 2.) Location
- 3.) Park fees
- 4.) Dates open
- 5.) Visitors per year (or ranking)
- 6.) Date founded

4.1.2 Examples of searchable attributes

- 1.) Major sites
- 2.) Facilities
- 3.) Campgrounds
- 4.) Events
- 5.) News
- 6.) Wildlife
- 7.) Seasonal climates

4.2 Recreational Activities

The model "Recreational Activities" represents the estimated 1000+ recreational activity opportunities throughout the United States. This model connects to the "States" model as different recreational activities are available based upon location, and it connects to the "National Parks" model as National Parks often include outdoor recreation.

4.2.1 Examples of filtered/sorted attributes

- 1.) Name
- 2.) Locations
- 3.) Fees
- 4.) Date
- 5.) Permit required (true/false)

4.2.2 Examples of searchable attributes

- 1.) Activity type
- 2.) Sponsoring Organization
- 3.) Facilities
- 4.) Events
- 5.) Tours

4.3 States

The model “States” represents the 50 states within the United States. This model connects to the “Recreational Activities” model as different recreational activities are available based upon location, and it connects to the “National Parks” model as National Parks are visited heavily based upon their location and are tied to the ecosystem of the land they exist on.

4.3.1 Examples of filtered/sorted attributes

- 1.) State name
- 2.) Physical activity by state
- 3.) Number of national parks
- 4.) Number of recreational activities available
- 5.) Population

4.3.2 Examples of searchable attributes

- 1.) Native animal species
- 2.) Native plant species
- 3.) Bodies of water
- 4.) Land characteristics
- 5.) Tourist attractions

5 Tools

- React JS - JavaScript library, namely using react routing
- Node - JavaScript run-time environment that executes JavaScript code outside of a browser
- Express - Web application framework for Node.js, designed for building web applications and APIs
- GCP - Used to deploy and host the web application
- Bootstrap - free and open-source CSS framework directed at responsive, mobile-first front-end web development
- Postman - Used to document our API and output in HTML format.
- Gitlab - Used to host our code and provide CI/CD environments
- Pixabay - Used to find royalty-free images for the static site
- NameCheap - used to provide website URLs

6 Hosting

URL: putitinpark.xyz (and putitinpark.me)

Website URLs were obtained using NameCheap, and the site itself is hosted using Google App Engine.

Details to deploy the app using app engine can be found here

<<https://cloud.google.com/appengine/docs/standard/nodejs/building-app/deploying-web-service>>,

and are also listed below.

- Clone the repository onto your local machine.
- Navigate to the cloned repository directory.
- Install the [gcloud command-line tool](#).
- Run 'gcloud app init' in the repository directory, then select the appropriate project from the list provided (You must be invited to the correct gcloud project).
- When ready to deploy, run 'gcloud app init'.