Open Source
Rock Climbing Data

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Goals for the “rock climbing app”

**Tasks**

- Aggregate climbing data from various climbing websites
- Search & Filter

**Open Data**

- Simplify data entry to OpenStreetMap
- Climbing-specific API, bulk downloading of data
Challenges and Lesson learned

Technical

Community Outreach
Web app: Leaflet, React.js
Rest API: Flask, SQLAlchemy
PostGIS database
Mobile app: TBD
What is climbing data or “Beta”? 

If rock climbing routes are Git repos, “beta” is the README.md file

- Absolute and relative location. Where is it? and what is nearby?
- Difficulty, specific holds for foot/hand, required equipment, subjective safety precaution, quality of rock
- Personal anecdotes, forums

https://en.wikipedia.org/wiki/Beta_(climbing)
Technical Challenge #1

How to model climbing routes, walls, sectors in OpenStreetMap?
Model climbing data in OpenStreetMap

Climb

Node, a point with latitude and longitude

Wall

Way, an ordered list of nodes

Sector/Area

Closed Way??

Relation: logical grouping of nodes, ways and/or other relations
Non-technical Challenge #1: Community Outreach

Open data is still a new concept in the climbing community

Manny Rangel developing a new route in Arizona
How to get people to contribute?

1. Simplify data entry and editing
2. Seed OSM with correct data
Heat map of climbing walls in western USA. Data from MountainProject.com.
OpenBeta Initiative
https://openbeta.io

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