



Powder Junkie

Akshay Patnaik, Lance Kluge,
Josh Huang, Julia DiTomas,
Thomas Parameswaran

Vision

Powder Junkie is a ski resort review app that provides real-time, crowd-sourced updates on mountain conditions and terrain quality.

It is for skiers and snowboarders who want to explore new mountains, to find the best resort to visit each day, and to share their experiences and opinions with the world.

Unlike traditional review platforms with static information, Powder Junkie ensures users make informed decisions on the go and get the most out of the ski season.

Tools - HTML/CSS

Purpose: Webpage structuring and styling

Rating: 3 stars



Tools - Handlebars

Purpose: Dynamic page rendering,
consistent layout

Rating: 5 stars



Tools - NodeJS

Purpose: Application server

Rating: 4 stars



Tools - PostgreSQL

Purpose: Relational Database (storage of users, mountains, reviews, images, weather observations, and forecasts)

Rating: 5 stars



Tools - Google Maps API

Purpose: External API for displaying maps with pins

Rating: 4 stars



Tools - National Weather Service API

Purpose: External API for retrieving weather observations and forecasts

Rating: 2 stars



Tools - Postman

Purpose: API testing (both ours and external)

Rating: 4 stars



Tools - Render

Purpose: App deployment

Rating: 4 stars



Tools - Docker

Purpose: Containerization

Rating: 4 stars



Tools - VSCode

Purpose: Integrated Development Environment, pair programming

Rating: 5 stars



Tools - Mocha/Chai

Purpose: Automated Testing

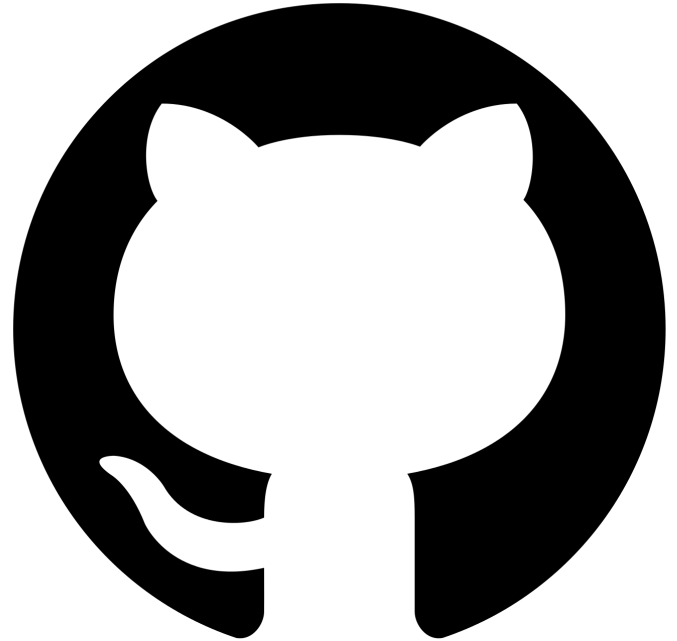
Rating: 3 stars



Tools - GitHub

Purpose: Version control, project tracking, peer code review, agile methodology

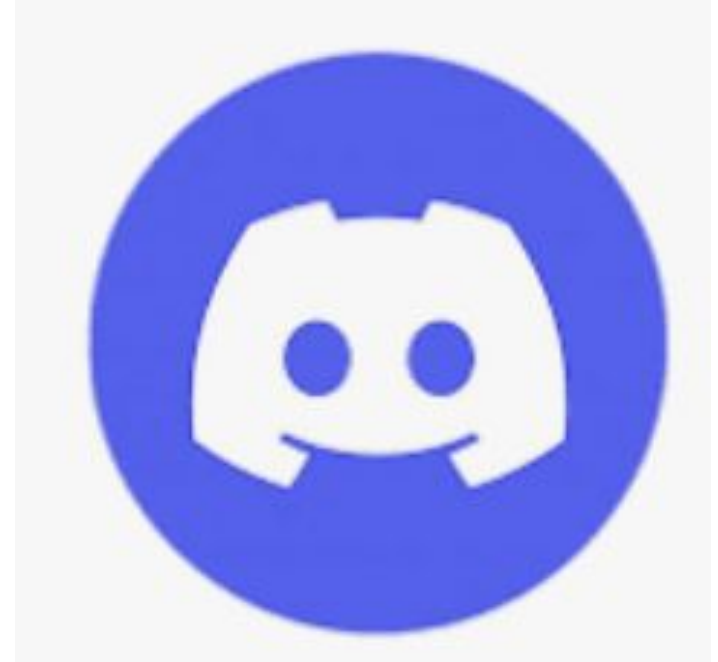
Rating: 5 stars



Tools - Discord

Purpose: Team communication and meetings

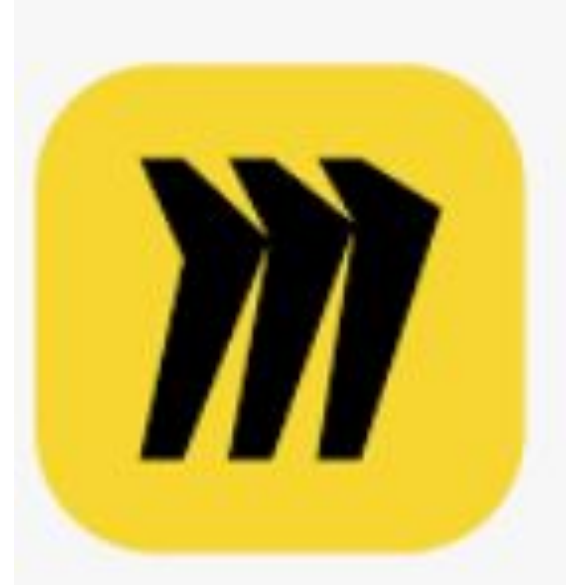
Rating: 5 stars



Tools - Miro

Purpose: Collaborative whiteboard,
wireframing, meeting notes, database
Entity Relationship Diagram

Rating: 5 stars



Methodologies - Agile

Purpose: Flexible project planning and development

Rating: 3 stars



Methodologies - Peer Code Review

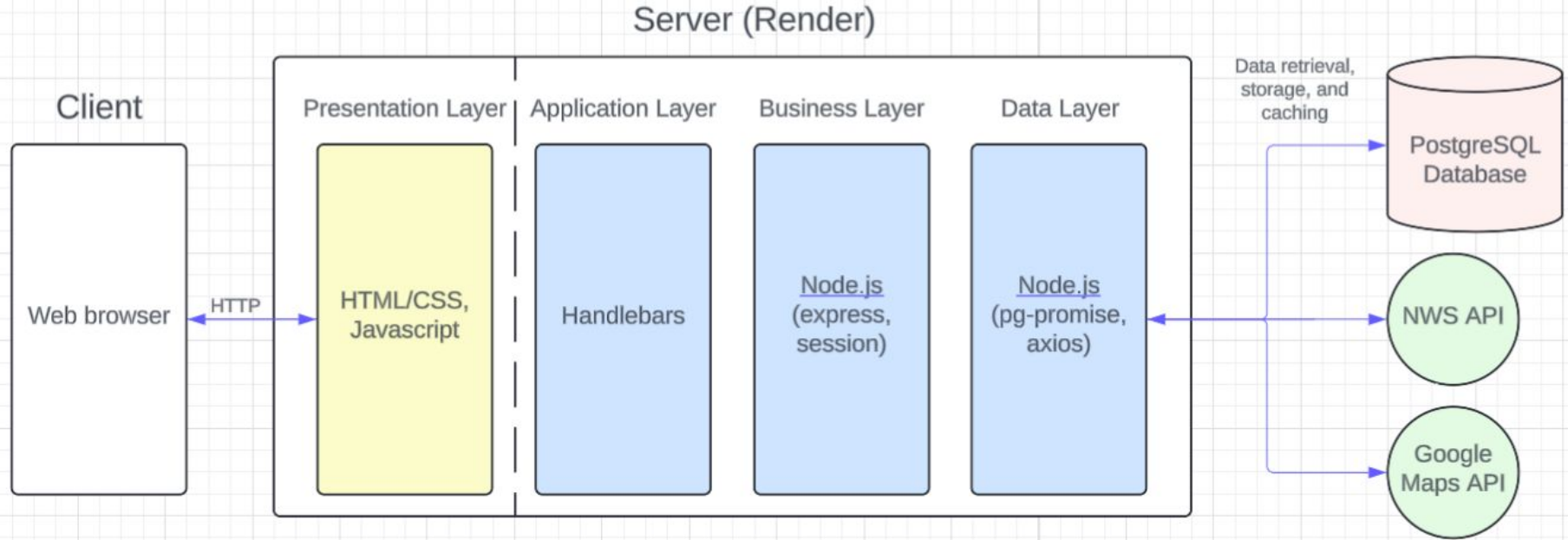
Purpose: Code checks before merging,
ensuring whole team is on same page

Rating: 4 stars



```
ProjectSourceCode/index.js
547 547    })
548 548    .catch((err) => {
549 - console.log('User not found:', err);
550 - res.render('pages/login', { message: 'User not found'
549 + //console.log('User not found:', err);
550 + res.render('pages/login', { user: req.session.user, m
message: err.message;
551 551    });
552 552  });
553 553  });
554 554  });
555 555  app.get('/mountain/:id', async (req, res) => {
556 + const messageIN = req.query.message;
556 557  const mountainId = req.params.id;
557 558  const query = `SELECT * FROM mountains WHERE mountain_id =
558 559  const passesQuery = `SELECT passes.pass_name FROM passes
@@ -563,7 +564,8 @@ WHERE mountains_to_passes.mountain_id =
563 564  JOIN reviews ON mountains_to_reviews.review_id = reviews.i
```

Architecture

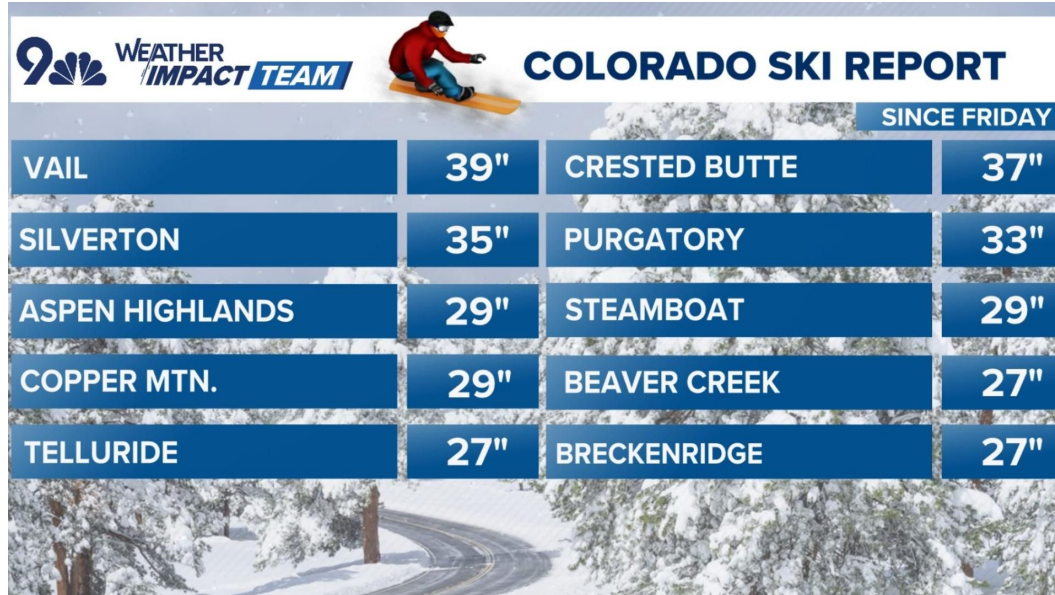


Challenges

- Limited documentation of external APIs
 - Solution: Experimentation, starting with “best guess” and troubleshooting from there
- Visualizing Star Ratings
 - Not really a good built in way to do it with bootstrap or html and css
 - Solution: Created an external JS file that dealt with the creation of the star rating based on passed in rating and div id.
- Merging a bit of outdated stuff
 - Had to push fixes as some stuff was no longer viable or needed
- Displaying images in Render when instance spins up after inactivity
 - Previously uploaded images prior to our instance spinning up are not saved since we do not have a Disk instance (which is paid)

Possible Enhancements

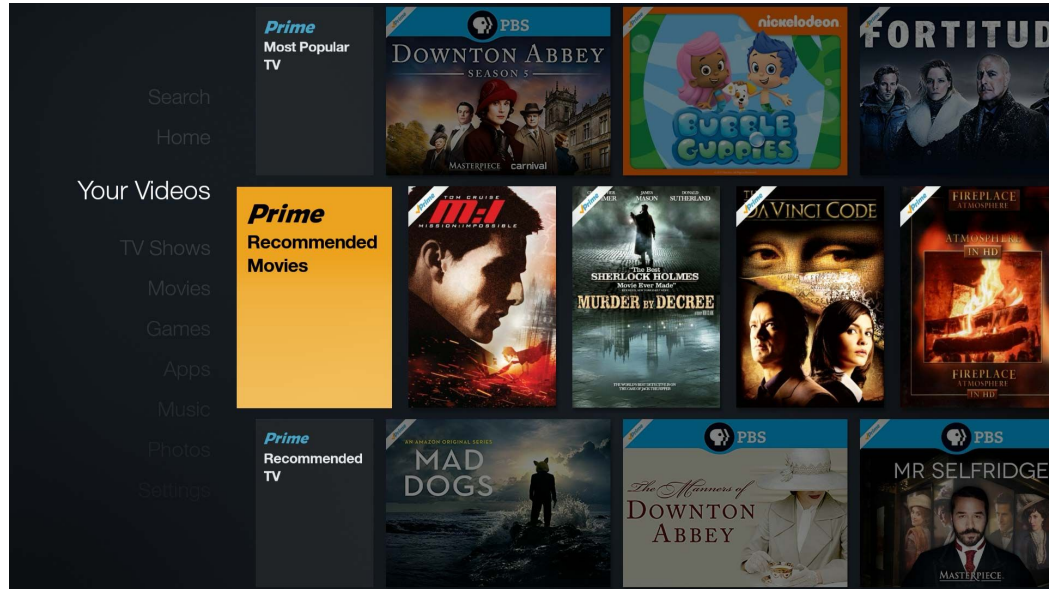
- Daily snow reports scraped from each mountain's website for comparing real-time conditions



COLORADO SKI REPORT			
SINCE FRIDAY			
VAIL	39"	CRESTED BUTTE	37"
SILVERTON	35"	PURGATORY	33"
ASPEN HIGHLANDS	29"	STEAMBOAT	29"
COPPER MTN.	29"	BEAVER CREEK	27"
TELLURIDE	27"	BRECKENRIDGE	27"

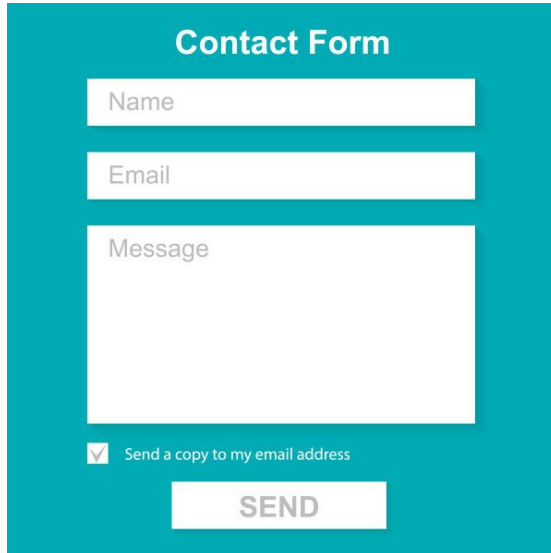
Possible Enhancements

- Recommendations tailored to the user based on their location, ability level, terrain preferences, and previous reviews.



Possible Enhancements

- Admin account that can add new mountains, and form for users to request additions.



Contact Form

Name

Email

Message

☒ Send a copy to my email address

SEND

Possible Enhancements

- Ability to respond to other reviews on mountains.



Demo

