



SAP Atlas

Project Details

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THE BEST RUN 

Thank you all very much for coming. You have all expressed interest in taking over development and maintenance of SAP Atlas, so thank you!

Agenda

- Project background
- Project overview
- Project maintenance (musts)
- Project development (wants)
- Development process
- Important notes
- Future features (you can start here)
- Overview of architecture/codebase (time permitting)

From Team 8 to Project Atlas

What was the **problem**?

The existing meeting room finder web application is outdated and has very limited functionality

What was our **solution**?

A redesigned office navigation tool that boasts a number of new features

What is the **impact**?

- Increased internal productivity
- Facilitates a comfortable office environment

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Atlas started as a hackathon project in March 2018.

The hackathon prompt was “digitizing the workplace.”

The problem we identified was with the current meeting room finder application. It is outdated and has very limited functionality.

Our solution was to create a brand new, completely redesigned office navigation tool that boasts a number of new features.

Atlas has two high-level goals: increase internal productivity, and facilitate a more open and comfortable office environment.

Project Overview

Core Features:

- Search for rooms by name, floor, seat, and A/V equipment
- Additional room details
- Room and desk locating
- Cross-floor pathfinding
- Shareable sessions (URL parameters)
- Map filters

Atlas was built with React.js, Redux, and Semantic UI

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Atlas has 6 core features:

- Parameterized room searching: users can search for rooms by name, floor, seats, and A/V equipment
- Additional room details: users can see details about a room, such as how many seats it has and what A/V equipment it has
- Room and desk locating: selecting a room or desk will drop a pin on the map where the room or desk is located
- Cross-floor pathfinding: users can navigate the office with a dynamic pathfinding tool
- Shareable sessions: users can share the URL with colleagues and they will be able to see what the user sees
- Map filters: users can highlight the different parts of the map: bathrooms, kitchens, stairs, elevators, and for the first floor, amenities

Atlas was built using React.JS, Redux, and Semantic UI

Project Maintenance

Virtual machine:

- Keep the OS up to date
- Keep all software updated (e.g. node, npm, nginx, etc.)
- Clean up snapshots and logs every couple months
- Periodically restart the VM

Repository:

- Keep the node packages updated
- Periodically check that there are no security vulnerabilities in the packages being used
- Update maps, rooms, desks, etc. when asked by facilities

Management:

- Renew the VM booking when necessary (don't let it expire!)
- Renew PKI certificate (allows the application to be served over HTTPS)
- Someone needs to be the VM "owner" (basically a point of contact for EngSrv. team)

These are the musts for Atlas to move forward. These tasks need to be done on a regular basis, regardless of if actual development is being done.

Project Development

- Report a bug and request a feature buttons direct users to the GitHub repo “issues” page to submit their report/request
 - Everyone can see what has been reported/requested
 - Publicly track progress
- Respond to all bug reports and feature requests
 - This shows users their feedback is heard and is valued
- Talk to stakeholders before implementing new features
 - Ensure the feature does not violate any security policies or other SAP policies
 - E.g. if booking is implemented, the application will be taken down if it is not done securely and the proper policies and processes have been followed (a security concept)

Development Process

Task management:

- Use Trello or JIRA if you can get a project created
- Pay attention to GitHub issues, consider using a Trello addon to view GitHub issues

Codebase health:

- Keep the coding style consistent
- Don't ever push straight to master! Create branches and then submit a pull request!
- Code review before merge

Project management:

- Prioritize needs before wants (e.g. bugs before features)
- Have a weekly or biweekly meeting
- Keep the line of communication open, update your team frequently
- Understand capacity, estimate tasks and if you don't think you can do something, let the team know

Before submitting a pull request, have at least one other developer on the project do a code review of your PR to make sure there are no code smells, bad practices, or potential bugs

Important Notes

- Before you go, find a new team to continue development and maintenance
 - There will be documentation on the transfer process
 - They will be responsible for carrying on this project, so pick responsible people you trust
 - Do knowledge transfers
- Write documentation
 - Have some sort of list of things you learned, decisions you made (and why they were made), and non-obvious things that the next team should know

Future Features

- Room booking and availability (needs a security concept, so start that early)
- Clickable rooms and desks (on the map)
- Mobile support (responsive UI)
- Slackbot integration (@atlasbot where is Anemone?, @atlasbot navigate from 2.D122 to Coho)
- Create a tool for facilities to easily modify room information, add/delete rooms/desks, etc.
- Simplify updating process
- Implement crowd-sourced maintenance
- Up to you!