Beta Presentation
PlanIt Capacity Planning Tool

The Capstone Experience
Team Atomic Object

Alec Gillis
Zach Skrobot
Simi Dias
Alex McLaughlin
Shengtong Jin

Department of Computer Science and Engineering
Michigan State University
Fall 2020
Project Overview

• PlanIt is a capacity planning tool used to manage project teams and allocate resources.
• The timeline view allows you to quickly visualize how your workforce is allocated.
• Simple edits can be made by using the modals or clicking and dragging on tiles.
System Architecture

User → Internet

React, Redux, Bootstrap 4

Apollo Server

Express, Node.js, Heroku

API

PostgreSQL

Backend (Server)

Database

Frontend (Client)
Timeline View

<table>
<thead>
<tr>
<th>OFFICES</th>
<th>PROJECTS</th>
<th>EMPLOYEES</th>
<th>FROM</th>
<th>TO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select an office</td>
<td>Select a project</td>
<td>Select an employee</td>
<td>11/09/2020</td>
<td>02/15/2021</td>
</tr>
</tbody>
</table>

| Alan Brooks          |                 |                 |                 |                 |                 |                 |                  |                  |                |                |                |                |                |
| Alberta Harrison     |                 |                 |                 |                 |                 |                 |                  |                  |                |                |                |                |                |
| Katey Barnes         |                 |                 |                 |                 |                 |                 |                  |                  |                |                |                |                |                |
| Sawyer Ellis         |                 |                 |                 |                 |                 |                 |                  |                  |                |                |                |                |                |
| Dainton West         |                 |                 |                 |                 |                 |                 |                  |                  |                |                |                |                |                |
| Alfred Johnston      |                 |                 |                 |                 |                 |                 |                  |                  |                |                |                |                |                |
| Elia Harris          |                 |                 |                 |                 |                 |                 |                  |                  |                |                |                |                |                |
| Alec Gillis          |                 |                 |                 |                 |                 |                 |                  |                  |                |                |                |                |                |
| Sabrina Wright       |                 |                 |                 |                 |                 |                 |                  |                  |                |                |                |                |                |
| Justin Evans         |                 |                 |                 |                 |                 |                 |                  |                  |                |                |                |                |                |
| Joyce                |                 |                 |                 |                 |                 |                 |                  |                  |                |                |                |                |                |
Add Project Modal
Edit Employee Modal
# Project Tool Tips

![Project Management Tool](image.png)

<table>
<thead>
<tr>
<th>Date</th>
<th>Frederick Richardson</th>
<th>Alan Brooks</th>
<th>Alberta Harrison</th>
<th>Katey Barnes</th>
<th>Sawyer Ellis</th>
<th>Dainton West</th>
<th>Alfred Johnston</th>
<th>Ella Harris</th>
<th>Alec Gillis</th>
<th>Sabrina Wright</th>
<th>Justin Evans</th>
<th>Joyce Andrews</th>
<th>George Watson</th>
<th>Penelope Crawford</th>
<th>Vincent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nov 09</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nov 16</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nov 23</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nov 30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dec 07</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dec 14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dec 21</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dec 28</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jan 04</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jan 11</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jan 18</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jan 25</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feb 01</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Employee:** Alberta Harrison
**Project:** AO Vacation
**Generated DO NOT EDIT**
**Hours:** 40
Click and Drag
Add Task Modal

<table>
<thead>
<tr>
<th>OFFICES</th>
<th>PROJECTS</th>
<th>EMPLOYEES</th>
<th>FROM</th>
<th>TO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select an office</td>
<td>Select a project</td>
<td>Select an employee</td>
<td>11/09/2020</td>
<td>02/15/2021</td>
</tr>
</tbody>
</table>

### Assign A Task

- **EMPLOYEE**: Melissa Barnes
- **PROJECT**: AO Conferences GENERATED...
- **HRS/WEEK**: 30
- **FROM**: 11/15/2020
- **TO**: 11/15/2020

[Submit] [Cancel]
Slack Integration

Planit Bot Test

- Saved Items
- More
- Channels
- # bot
- # general

- random
- Add channels
- Direct messages
- gillismail1213 you
- Add teammates
- Apps
- ClassicBot
- Add apps

#general

Add a topic

* gillismail1213 9:31 AM
  /pi -h

**Classic Planit** 9:31 AM
Planit bot guide!

Use the Planit Capacity Planning Tool from the comfort of Slack

Usage: /pi [OPERATION] [...]OPERATION_PARAMS]

Operations:
- h, help
  - Display the Planit bot usage guide
- person [FIRST_NAME] [LAST_NAME]
  - Find out what projects someone has scheduled this week
- project [PROJECT_NAME]
  - Find out who is working on a certain project this week

* gillismail1213 9:31 AM
  /pi person Joyce Andrews

**Classic Planit** 9:31 AM
This week Joyce Andrews is working on
  Release Support for 40 hours
  Development Help for 34 hours

* gillismail1213 9:32 AM
  /pi project Infrastructure

**Classic Planit** 9:32 AM
This week the following people are working on the Infrastructure project
  Wilson Bailey is assigned to 40 hours
  Spike Brown is assigned to 32 hours
  Miranda Payne is assigned to 16 hours

Send a message to #general
What’s left to do?

• Style Updates for Both Desktop and Mobile
• Admin Panel to Update Time Blocks and Office Visualization (New Requirement as of 11/5/2020)
• "User's manual"
• General Bug Fixes
Questions?