



# Beta Presentation

# Plant Capacity Planning Tool

The Capstone Experience

Team Atomic Object

Alec Gillis

Zach Skrobot

Simi Dias

Alex McLaughlin

Shengtong Jin



*From Students...*  
*...to Professionals*

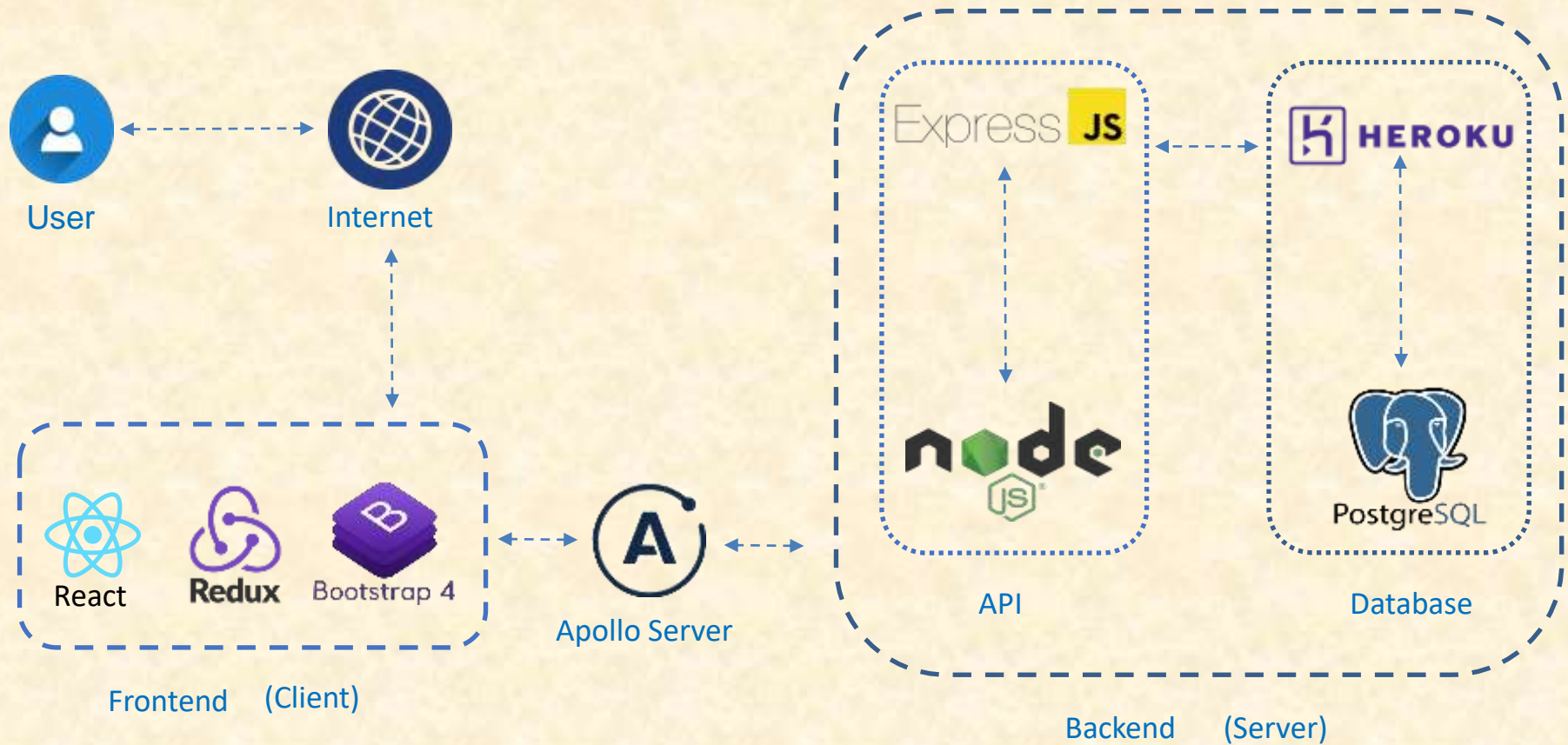
Department of Computer Science and Engineering  
Michigan State University  
Fall 2020

# Project Overview

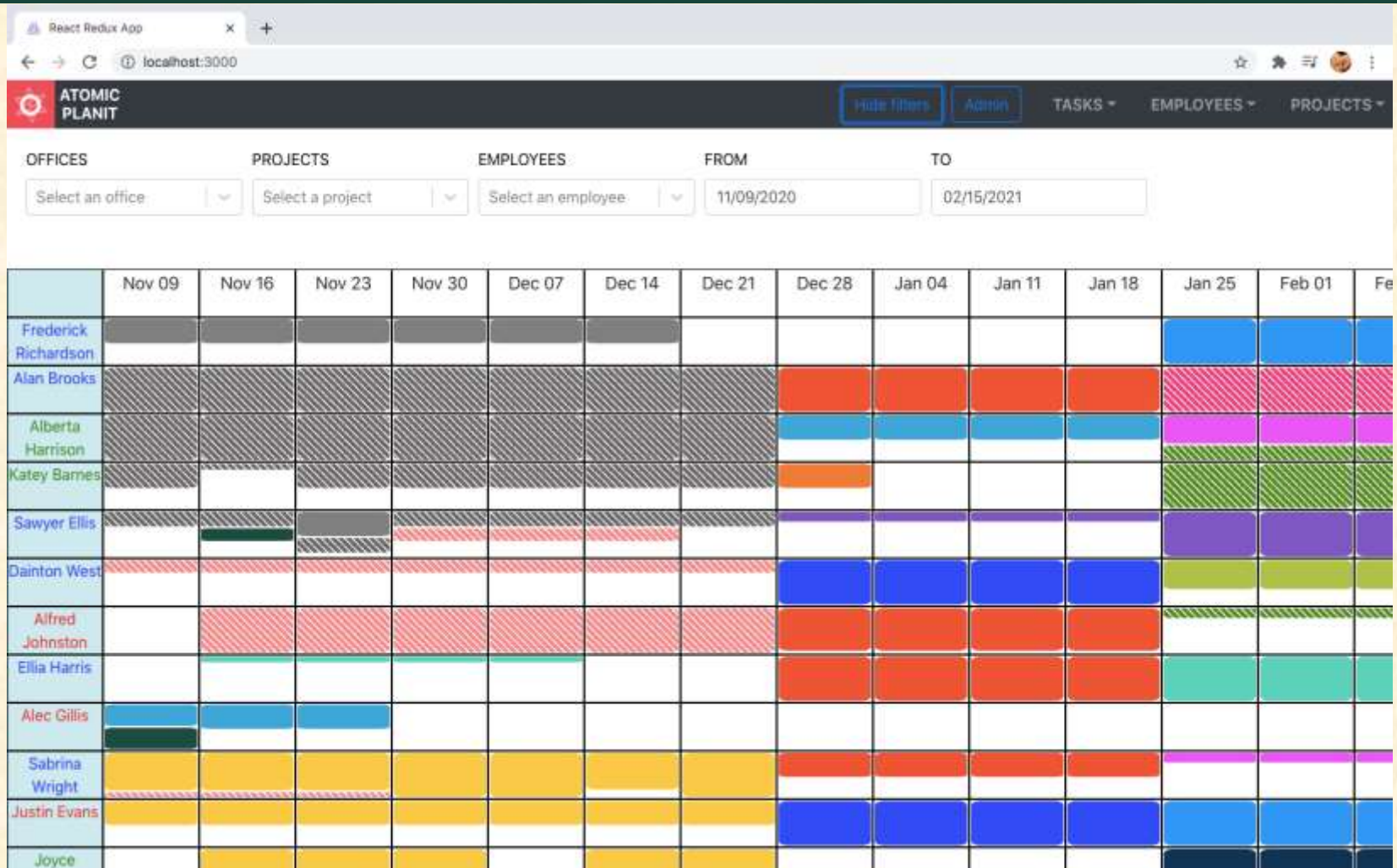
---

- 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.

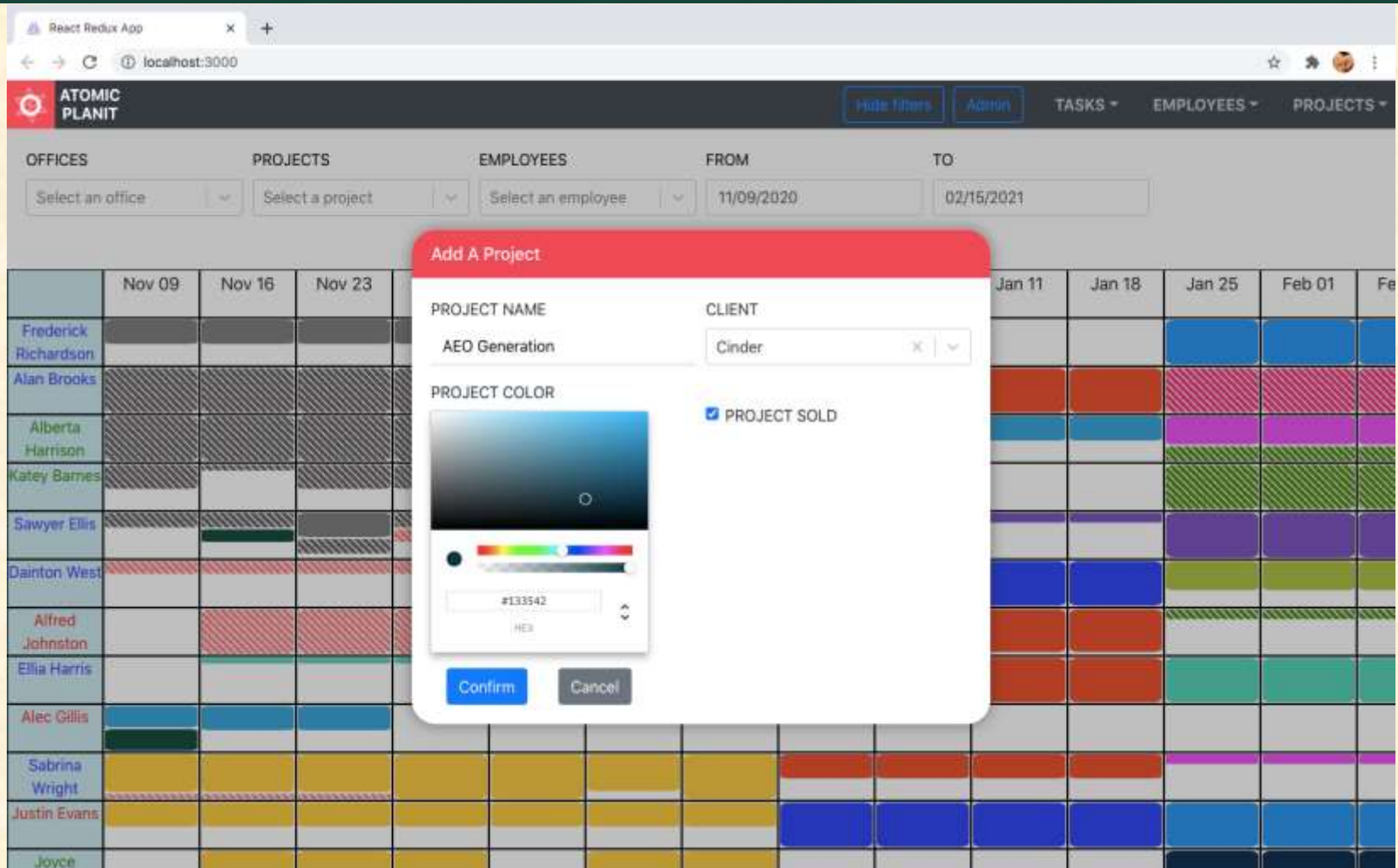
# System Architecture



# Timeline View



# Add Project Modal





# Edit Employee Modal

React Redux App

localhost:3000

ATOMIC PLANIT

Hide filters Admin TASKS EMPLOYEES PROJECTS

OFFICES: Select an office

PROJECTS: Select a project

EMPLOYEES: Select an employee

FROM: 11/09/2020 TO: 02/15/2021

**Edit An Employee**

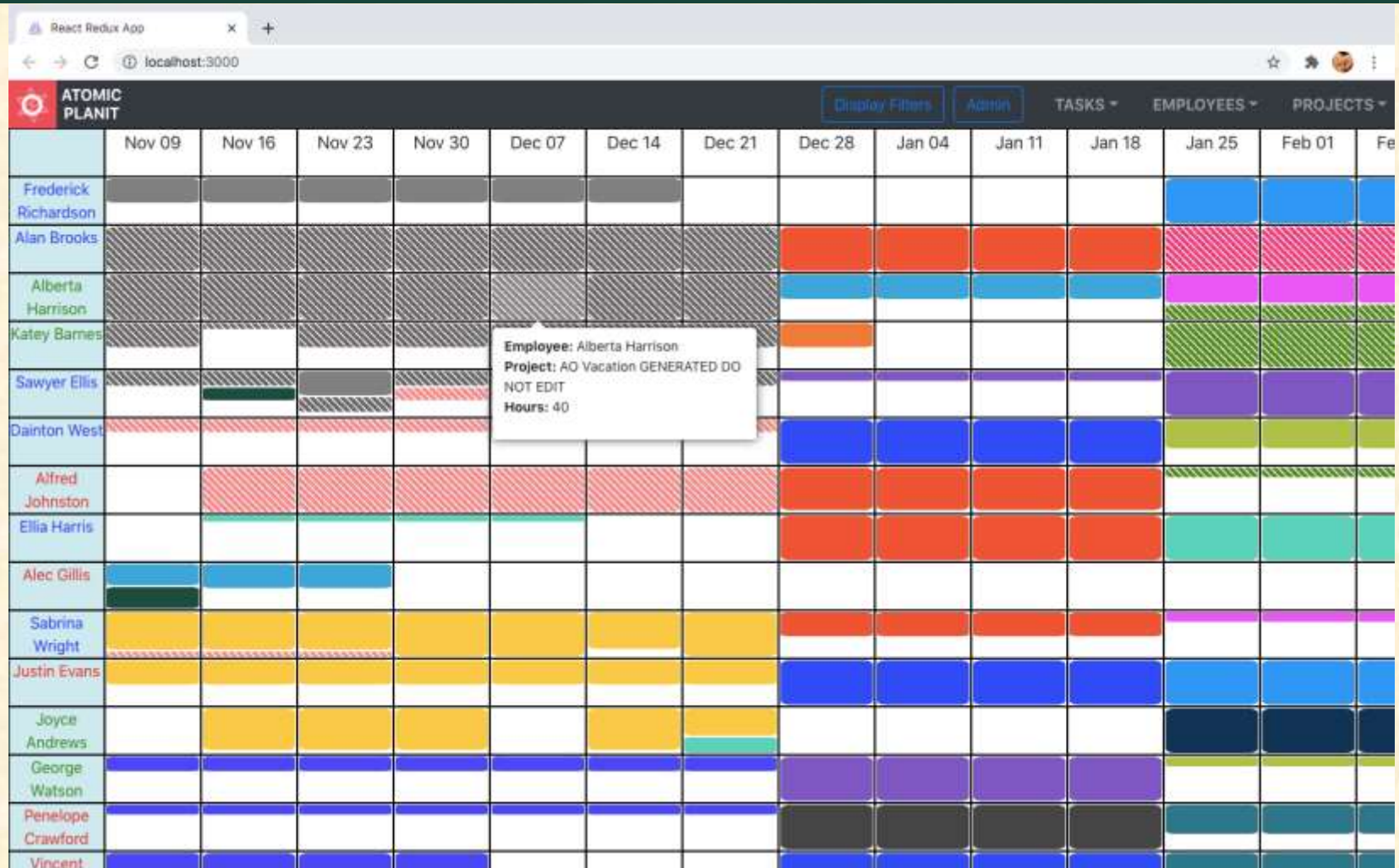
Employee:

FIRST NAME:  LAST NAME:

OFFICE:

	Nov 09	Nov 16	Nov 23	Nov 30	Dec 07	Dec 14	Dec 21	Dec 28	Jan 04	Jan 11	Jan 18	Jan 25	Feb 01	Feb 08
Frederick Richardson														
Alan Brooks														
Alberta Harrison														
Katey Barnes														
Sawyer Ellis														
Dainton West														
Alfred Johnston														
Ellia Harris														
Alec Gillis														
Sabrina Wright														
Justin Evans														
Joyce														

# Project Tool Tips



# Click and Drag

React Redux App x +

localhost:3000

ATOMIC PLANIT

Display Filters Admin TASKS EMPLOYEES PROJECTS

Vincent Thompson	Blue	Blue	Blue	Blue				Blue	Blue	Blue	Blue	Blue	Blue	Blue
Edward Hawkins	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Bruce Mitchell	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Tony Carter	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Blake Baker	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red
Jasmine Davis	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red
Oscar Hunt	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red
Stella Johnson	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red
Chelsea Wells	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey
Vincent Howard														
Wilson Bailey	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange
Lucas Wright	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange
Spike Brown	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange
Maria Williams	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange
Miranda Payne	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange
Alberta	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange



# Add Task Modal

The screenshot displays the Atomic Planit web application interface. At the top, there's a navigation bar with the logo, a 'Hide filters' button, an 'Admin' button, and tabs for 'TASKS', 'EMPLOYEES', and 'PROJECTS'. Below this is a filter section with dropdowns for 'OFFICES', 'PROJECTS', and 'EMPLOYEES', along with date pickers for 'FROM' (11/09/2020) and 'TO' (02/15/2021). The main area is a calendar grid with columns for dates from Nov 09 to Feb 01 and rows for employees: Frederick Richardson, Alan Brooks, Alberta Harrison, Katey Barnes, Sawyer Ellis, Dainton West, Alfred Johnston, Elia Harris, Alec Gillis, Sabrina Wright, Justin Evans, and Joyce. An 'Assign A Task' modal is open, showing a form to assign a task to an employee. The modal includes dropdowns for 'EMPLOYEE' (Melissa Barnes) and 'PROJECT' (AO Conferences GENERATED...), and input fields for 'HRS/WEEK' (30), 'FROM' (11/15/2020), and 'TO' (11/15/2020). 'Submit' and 'Cancel' buttons are at the bottom of the modal.

	Nov 09	Nov 16	Nov 23	Nov 30	Dec 07	Dec 14	Dec 21	Dec 28	Jan 04	Jan 11	Jan 18	Jan 25	Feb 01	Feb 08
Frederick Richardson														
Alan Brooks														
Alberta Harrison														
Katey Barnes														
Sawyer Ellis														
Dainton West														
Alfred Johnston														
Elia Harris														
Alec Gillis														
Sabrina Wright														
Justin Evans														
Joyce														

# Slack Integration

The screenshot displays a Slack workspace named "PlanIt Bot Test". The left sidebar shows a navigation menu with "Saved items", "More", "Channels", "Direct messages", and "Apps". The "Channels" section lists "# bot" and "# general", with "# general" selected. The "Apps" section shows "ClassicBot" and "Add apps".

The main content area shows the "#general" channel. At the top, it says "Add a topic". A message from "gillismail1213" at 9:31 AM says "!pi -h". A date separator indicates "Thursday, November 5th".

A "Classic PlanIt" app message at 9:31 AM provides a "PlanIt bot guide!". It instructs users to "Use the PlanIt Capacity Planning Tool from the comfort of Slack" and shows the usage: `!pi [OPERATION] [...OPERATION_PARAMS]`.

The guide lists "Operations:" with the following details:

- `-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

Another message from "gillismail1213" at 9:31 AM says "!pi person Joyce Andrews". A "Classic PlanIt" app message at 9:31 AM responds: "This week Joyce Andrews is working on Release Support for 40 hours Development Help for 34 hours".

A third message from "gillismail1213" at 9:32 AM says "!pi project Infrastructure". A "Classic PlanIt" app message at 9:32 AM responds: "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".

At the bottom, there is a text input field with the placeholder "Send a message to #general" and a row of icons for various Slack actions.



# 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?

---

?

?

?

?

?

?

?

?

?