MICHIGAN STATE UNIVERSITY

Project Plan
PlanIt Capacity Planning Tool

The Capstone Experience

Team Atomic Object

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From Students…
…to Professionals

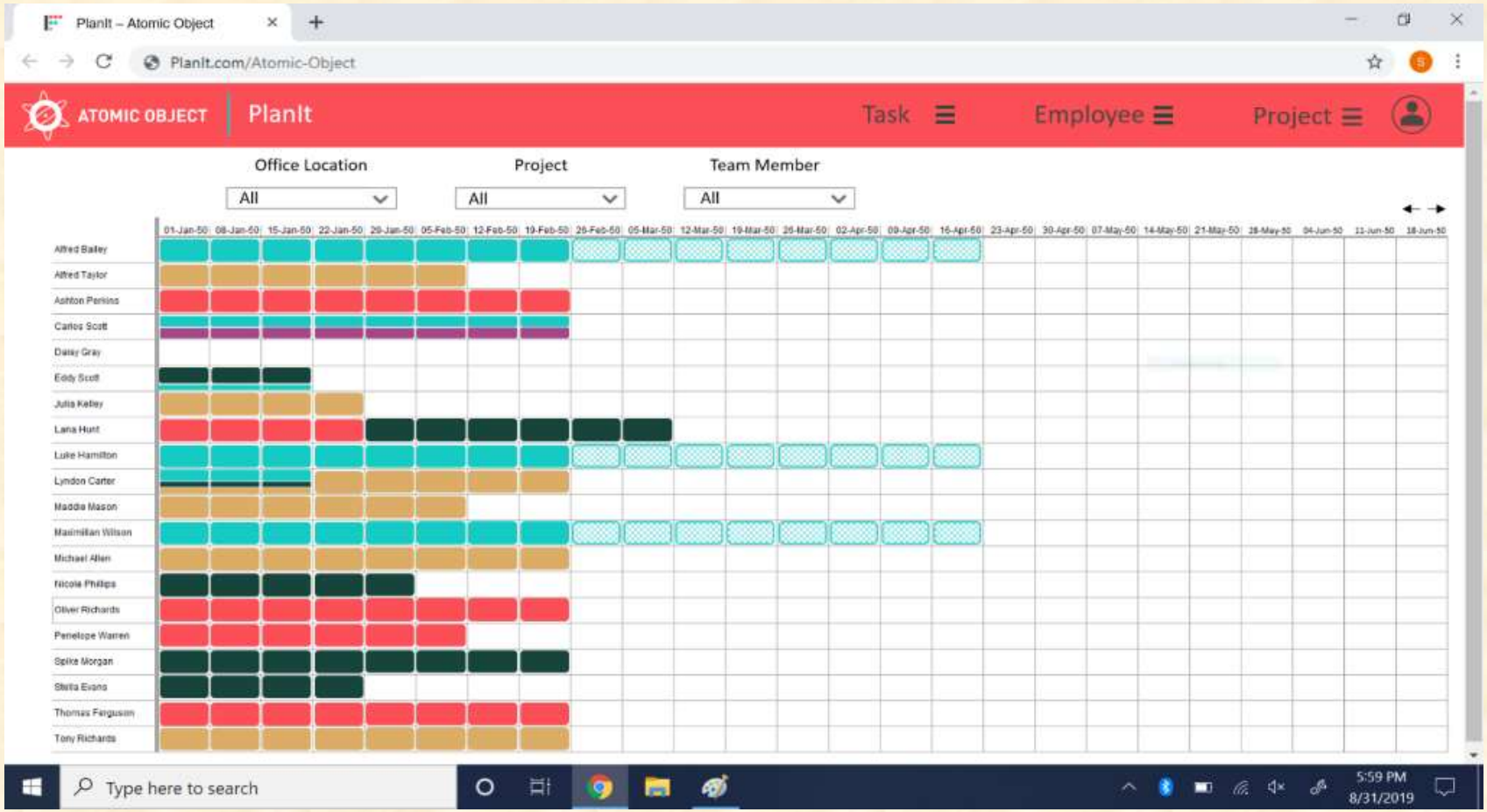
Functional Specifications

- Allows you to manage people, projects, and resources in your organization.
- Has built-in integrations with popular tools like JIRA, GitHub, and Slack to allow seamless operability for your organization.
- Improves upon the current app by making CRUD operations more convenient and intuitive.

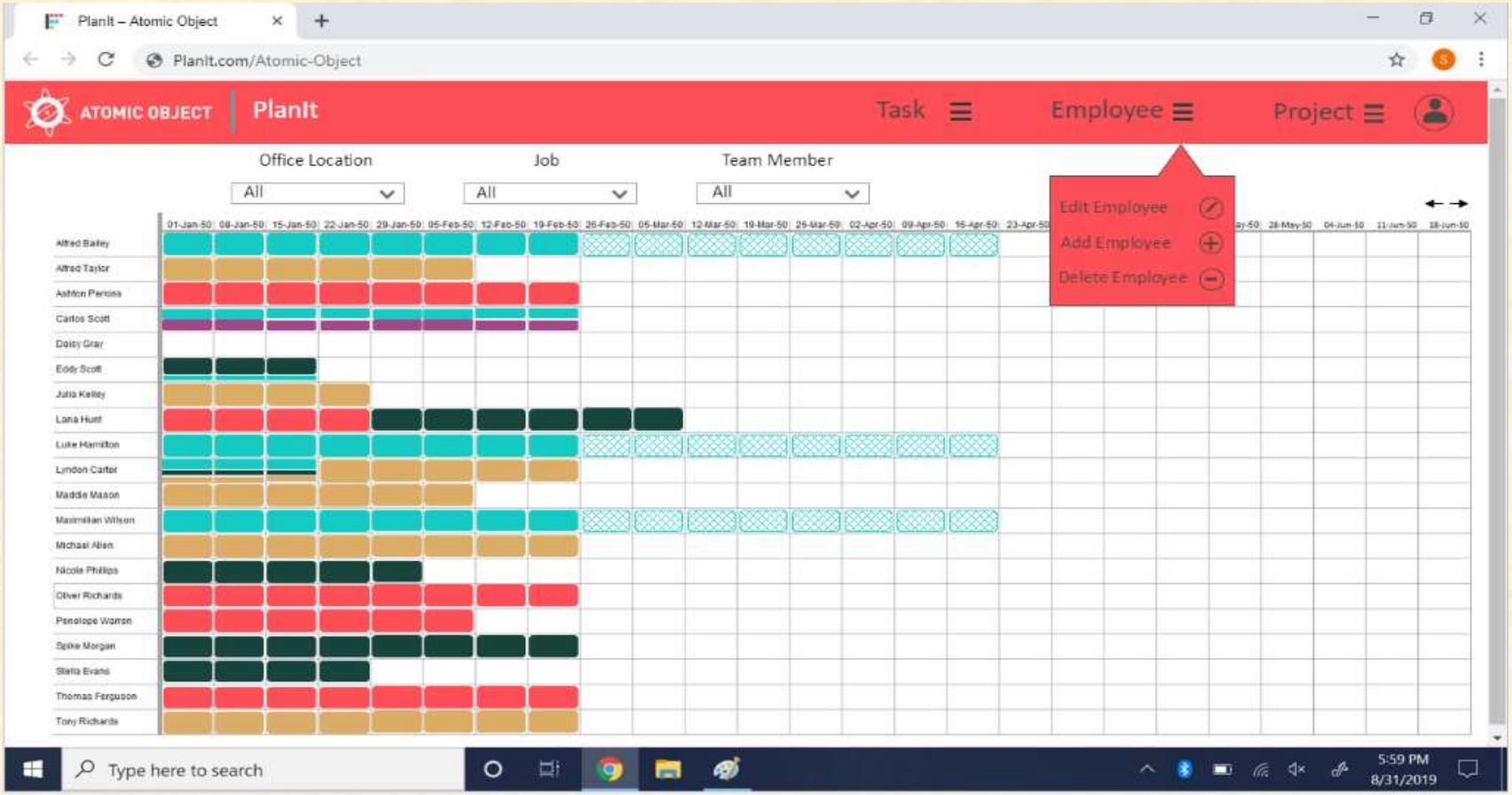
Design Specifications

- A flexible JavaScript single-page application
- Has a timeline view to visualize how work is allocated.
- Assign and edit employee, project, and team allocation through pop-up modals
- Can be used from desktop or mobile device

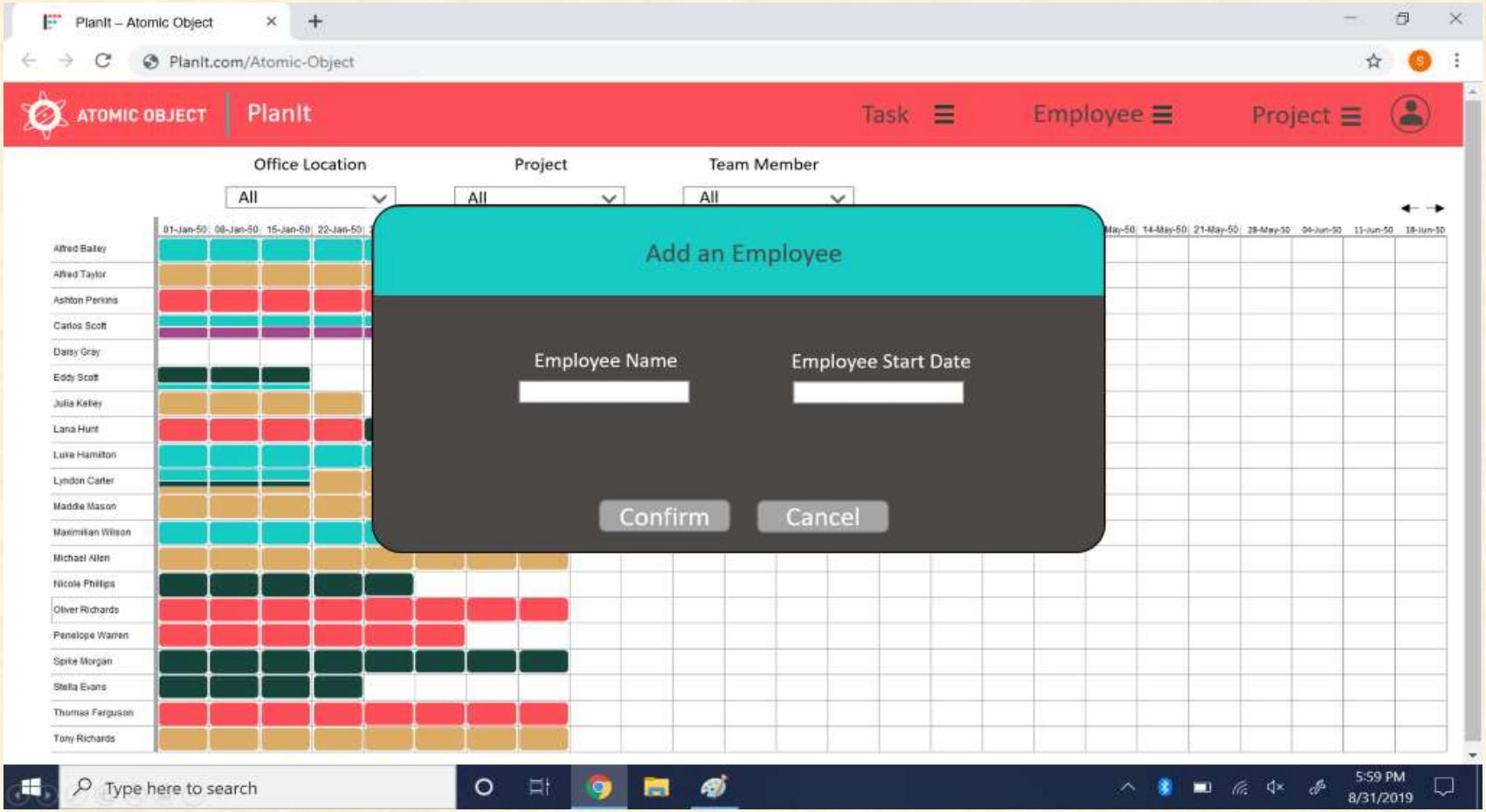
Screen Mockup: Web Interface



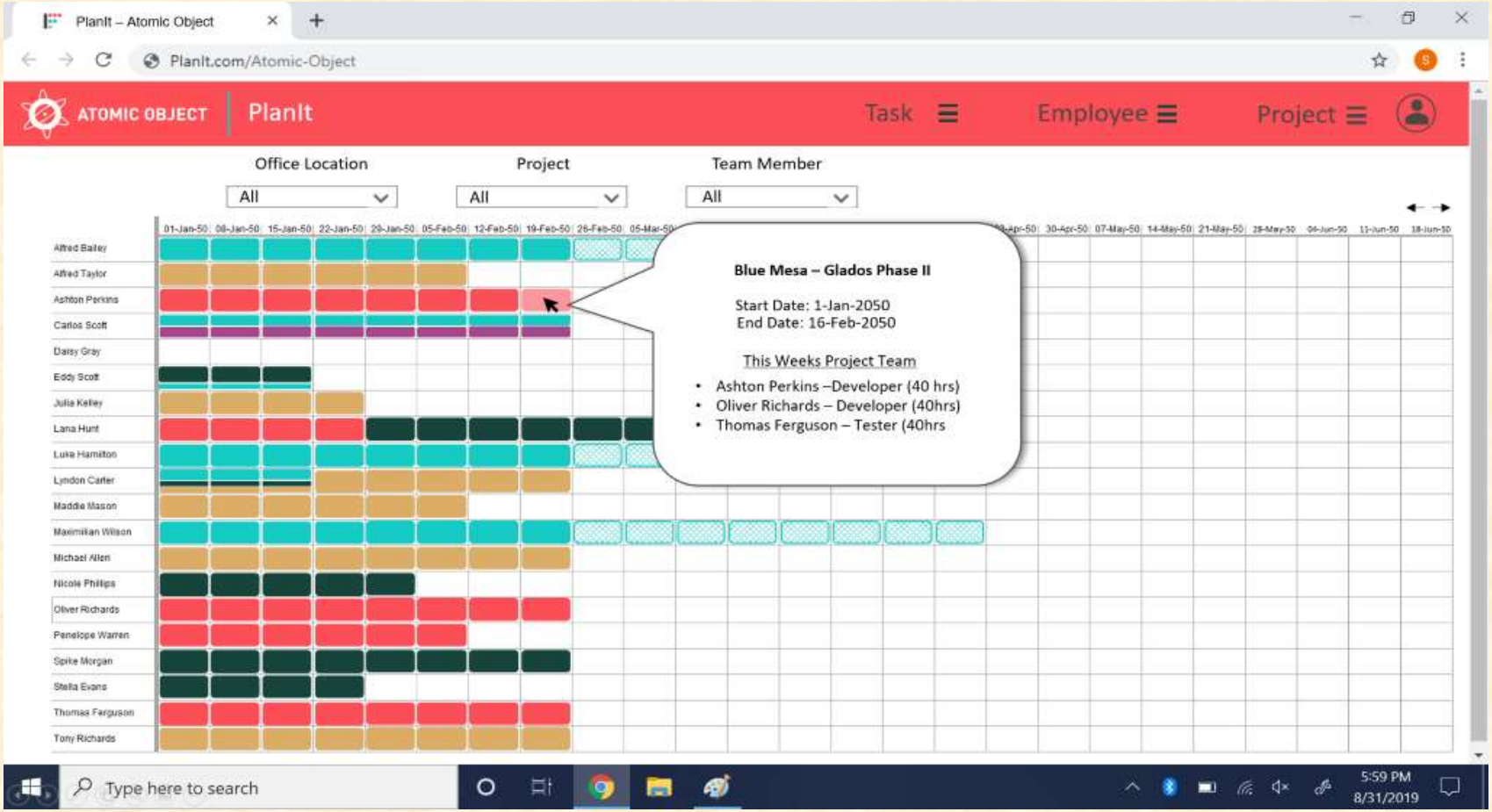
Screen Mockup: Menu Bar Drop Down



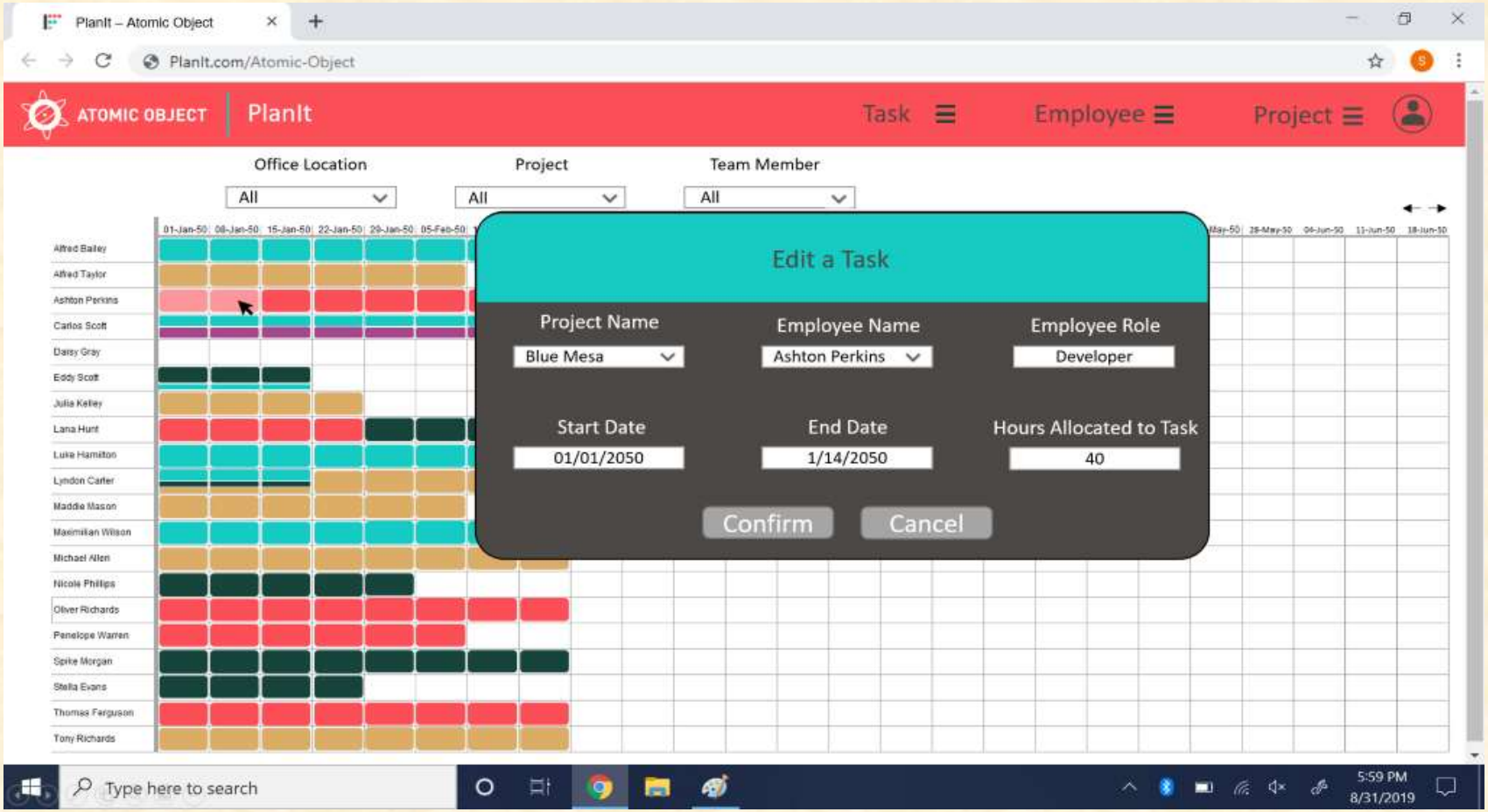
Screen Mockup: Modal Box



Screen Mockup: Hovering Over a Task



Screen Mockup: Click, Drag, and Edit

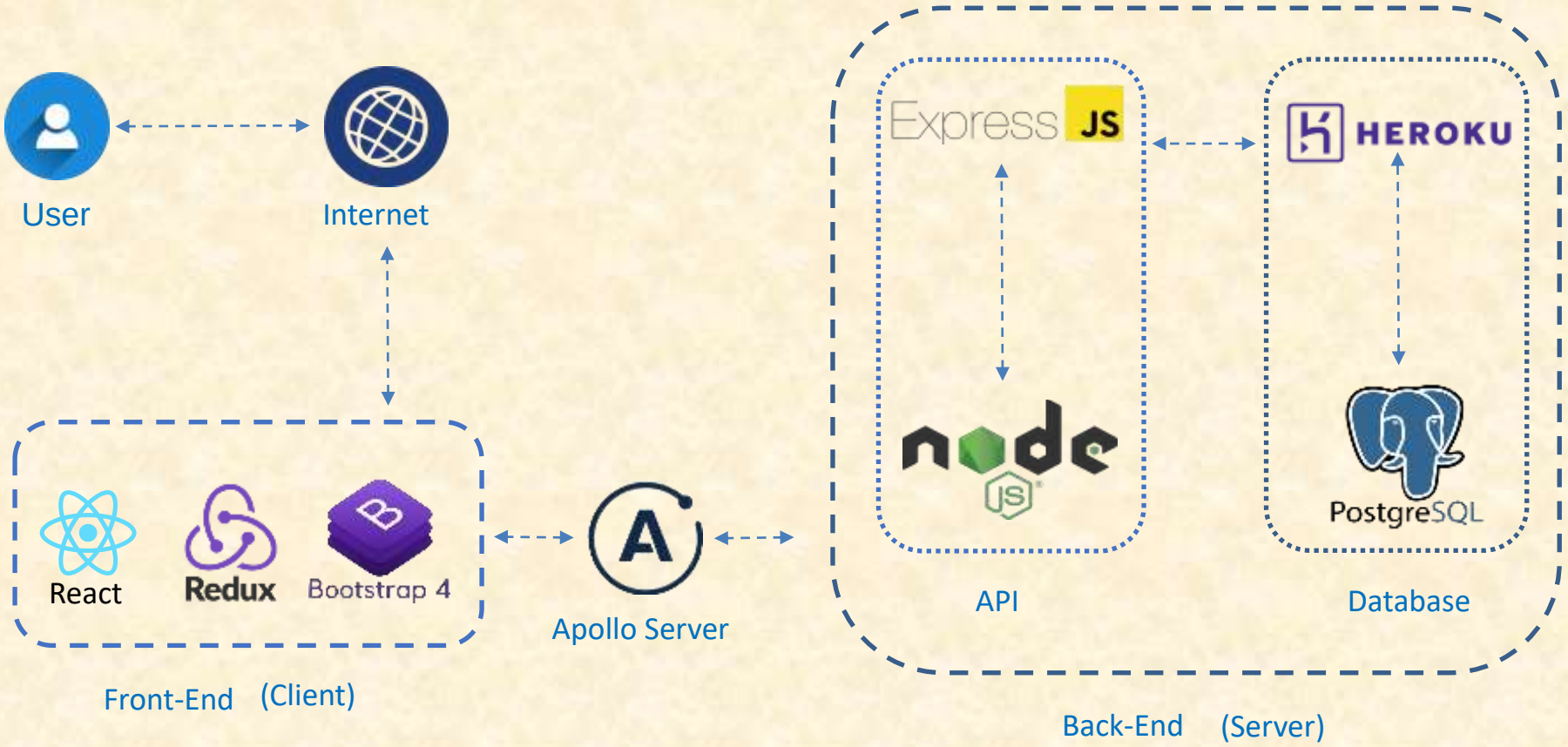


Screen Mockup: iOS Application

Technical Specifications

- HTML / CSS / ReactJS
- NodeJS
- ExpressJS
- GraphQl API
- Apollo Server
- PostgreSQL deployed on Heroku

System Architecture



System Components

- Hardware Platforms
  - No specific hardware required
- Software Platforms / Technologies
  - Heroku
  - React
  - Express
  - GraphQL
  - Apollo Server

Risks

- Risk 1
  - Integrating third-party applications
  - Research key apps early-on and write our code to accommodate their integration.
- Risk 2
  - Building a single-page web application
  - Keep code modular and consider the time complexity
- Risk 3
  - ReactJS Elements are Immutable
  - When we write our code, we will keep in mind immutability.

Questions?