

MICHIGAN STATE

UNIVERSITY

Beta Presentation

Shared Parking Access

The Capstone Experience

Team Bedrock Detroit

Ritu Ahluwalia

Jude Jang

Will Lennon

Michelle Mao

Eric Podolsky



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

Department of Computer Science and Engineering
Michigan State University

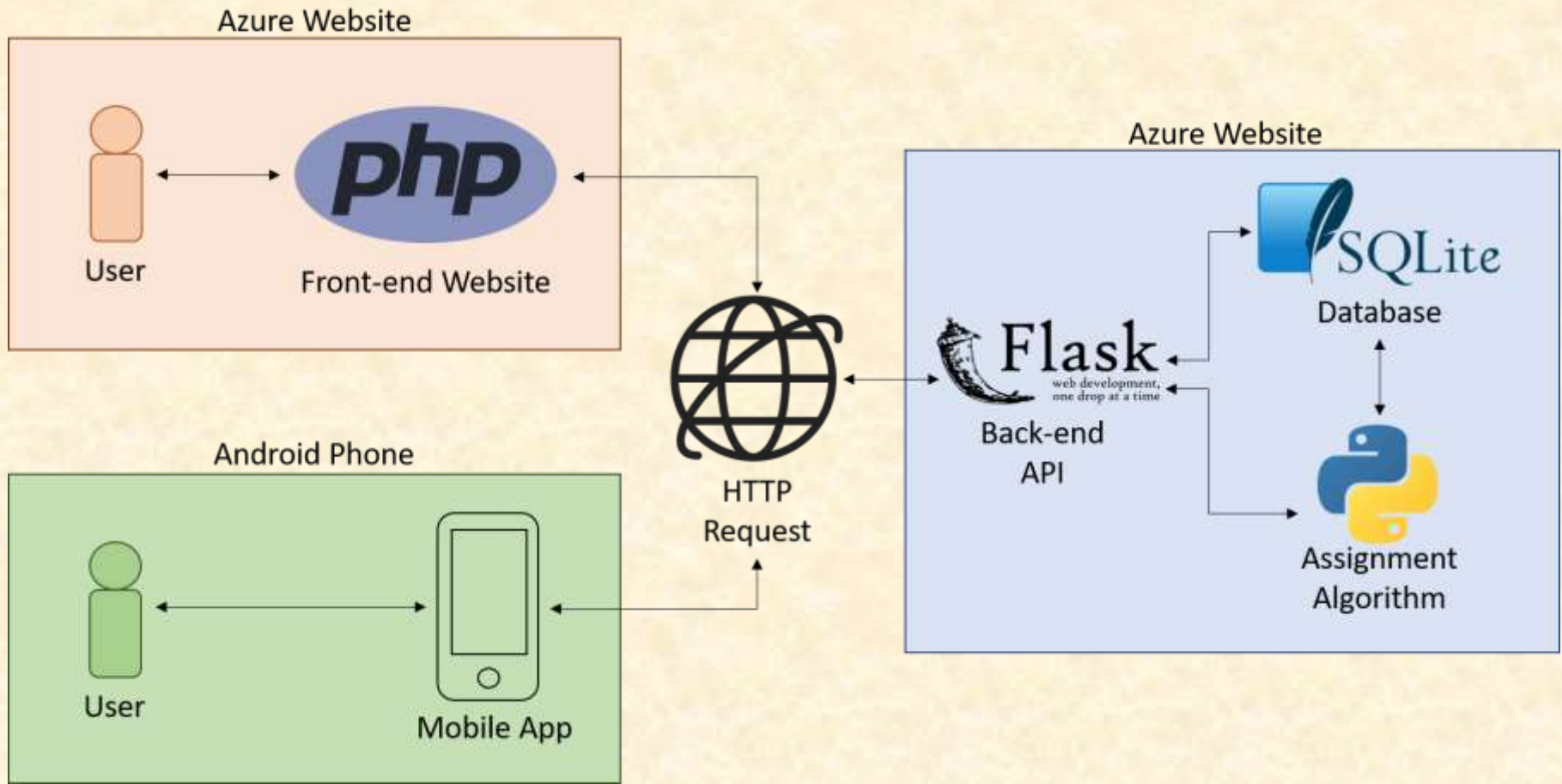
Fall 2020

Project Overview

- Rock FOC has found that employees prefer working in a hybrid format
- Create an application that allows Bedrock administrators to manage 25,000+ employees' parking assignments
- Assign optimal parking based on each individual's schedule, tenure, and business area through a dynamic algorithm
- Build a front-end website for Bedrock administrators a mobile app for employees



System Architecture



Website Homepage

The screenshot shows a web browser window displaying the 'SHARED PARKING ACCESS HOMEPAGE'. The browser's address bar shows 'localhost'. The page has a dark header with the title and navigation links: 'MANAGE PARKING FACILITIES', 'MANAGE OFFICES', 'MANAGE TEAM MEMBERS', and 'LOGOUT'. The main content area is divided into several sections:

- Set Rules For The Algorithm:** This section contains three dropdown menus for 'Select Priority #1' (set to 'Number of Schedule Days'), 'Select Priority #2' (set to 'Business Area'), and 'Select Priority #3' (set to 'Tenure'). A 'Save Priorities' button is located below these menus.
- Upload A New Schedule:** This section features a file upload area with a 'Choose File' button and the text 'no file selected', and a 'Run The Algorithm' button.
- Download New Parking Assignments:** This section includes two buttons: 'Download Assignments' and 'Inform Employees'. Below these buttons, it displays the text 'Parking Last Assigned: 11/11/2020, 10:29:41' and 'Average Walk Time From Parking Facility To Office Building: 7 Minutes 42 Seconds'.
- Generate Report About Employees With Distant Parking:** This section contains a 'Generate Report' button.
- Download An Empty Sample Schedule:** This section contains a 'Download Sample' button.

At the bottom right of the page, there is a large logo for 'BEDROCK - DETROIT -'. The logo consists of a stylized orange 'D' inside a circle, with the word 'BEDROCK' in large, bold, black letters below it, and '— DETROIT —' in smaller, black letters underneath.



Website Employee Management

The screenshot shows a web browser window with the URL 'localhost'. The page title is 'VIEW TEAM MEMBERS'. The navigation menu includes 'HOMEPAGE', 'MANAGE PARKING FACILITIES', 'MANAGE OFFICES', 'MANAGE TEAM MEMBERS', and 'LOGOUT'. A summary box indicates 'Number Of Team Members In 1001 Woodward Garage : 365'. Two employee profiles are displayed, each with a 'More Details' button and three action buttons: 'Inform Employee', 'Edit', and 'Remove'.

VIEW TEAM MEMBERS

HOMEPAGE MANAGE PARKING FACILITIES MANAGE OFFICES MANAGE TEAM MEMBERS LOGOUT

Number Of Team Members In 1001 Woodward Garage : 365

Krystal Padilla
ID: 52446
E-Mail Address: Test@Gmail.com
Phone Number: 9899540438
Team Leader ID: 13574
Office Building: Federal Reserve
Parking Facility: 1001 Woodward Garage

More Details

Inform Employee Edit Remove

Heena Roberson
ID: 98421
E-Mail Address: Podols10@Msu.edu
Phone Number: 9899540438
Team Leader ID: 24773
Office Building: Federal Reserve
Parking Facility: 1001 Woodward Garage

More Details

Inform Employee Edit Remove



Employee Homepage



Edit Employee Info

5:29

Bedrock Administrator

10133 SEARCH

Name Dianne Ho

Unique ID 10133

Email podols10@msu.edu

Phone 9899540438

Leader ID 10867

Schedule Day THURSDAY 11/12/2020

5:30

Bedrock Administrator

Email podols10@msu.edu

Phone 9899540438

Leader ID 10867

Schedule Day THURSDAY 11/12/2020

Assigned Office ONE CAMPUS MARTILIUS

Assigned Parking FORD FIELD DECK

SAVE CHANGES



What's left to do?

- Finalize documentation
 - API routes
 - Auth0 account installation
 - MapQuest account installation
- Add salts to passwords for the mobile app



Questions?

?

?

?

?

?

?

?

?

?

