MICHIGAN STATE UNIVERSITY **Alpha Presentation #BIKES4ERP Tracking Initiative The Capstone Experience Team Evolutio** Caleb Duchan Yash Sharma

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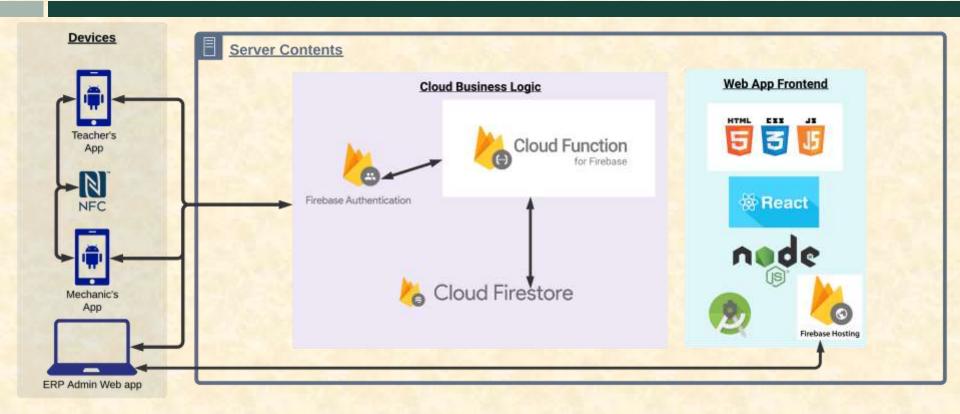


From Students... ...to Professionals

Project Overview

- Evolutio supports Elephants, Rhinos & People (ERP) on the #BIKES4ERP Initiative.
- #BIKES4ERP provides and maintains bicycles for students in Southern Africa, getting them to school faster and energized!
- The #BIKES4ERP Tracking Initiative consists of applications to streamline bike maintainence and organization.
- The applications predict bike breakdowns, needed parts, and help ERP Admins track the success of the program.

System Architecture



Teacher's Scan Page

| ≡ Scan | | | |
|---------------|---|---------------------|--|
| M | inually enter I | D | |
| | ENTER | | |
| Ready | To Scar | 1 Bike | |
| | i-J | ~ | |
| | | | |
| C | €ענ | り | |
| Hold the | top of you | y phone | |
| Hold the next | top of you to the NFG | y phone C tag | |
| next | top of you to the NFC | C tag | |
| next Bit | to the NFG | o2 | |
| next Bit | to the NFC e #ID: 020100 ent Name: Ro | o2 | |

The Capstone Experience

Mechanic's Bikes Page

| Filter By: | Q |
|---------------|---|
| Filter by. | ~ |
| Bike | 5 |
| Bike #0111011 | |
| Bike #0111012 | |
| Bike #0111013 | |
| Bike #0111014 | |
| Bike #0111015 | |
| Bike #0111016 | |
| | |
| | |
| | |
| | |
| | |
| | |

Mechanic's Repair Request Tab

| ERP | | | | |
|-------------|-----------------|------|--|--|
| REQUEST | | KETS | | |
| F | Repair Requests | | | |
| Repair Requ | est 1 | | | |
| Repair Requ | est 2 | | | |
| Repair Requ | est 3 | | | |
| Repair Requ | est 4 | | | |
| Repair Requ | est 5 | | | |
| | Request Info | | | |
| Bike ID: | 0201031 | | | |
| Condition: | Non-Functional | | | |
| Note: | Chain Broken | | | |
| BIKE INFO | | | | |

Mechanics Inventory Page

Inventory Inventory Chain x8 ORDER Chain Stay x17 ORDER Pedal x13 ORDER Rear Break x9 ORDER Rear Derailleur x3 ORDER Seat x5 ORDER Seat Stay x2 ORDER Spoke x9 ORDER Tire Valve x18 ORDER Tube x23 ORDER Tire x12 ORDER Searing x200 ORDER. **REVIEW PART ORDERS** Ê Inventory

The Capstone Experience

What's left to do?

- Add Error Handling
- Filtering bike results
- Bikes assigned to specific users
- Notifications need to be added
- Implement Cloud functions
- Ordering parts functionality

Questions?

