Beta Presentation
Dashboard for Data Visualization
The Capstone Experience

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Project Overview

• Our Dashboard for Data visualisation provides real time data from autonomous delivery robots in a Web Application for employees at Magna:
  ▪ Data for each individual robot (robot health)
  ▪ Fleet status data (deliveries and packages)

• Dynamically update QuickSight with new data from the robots on the ground using S3.

• Implement testing for existing LMDD website, including our newly added features.
System Architecture

[Diagram showing the system architecture with components such as AWS Cloud, S3 Buckets, Lambda, QuickSight, Vue.js, and MAGNA's Internal LMDD Website.]

The Capstone Experience
Team Magna Beta Presentation
Delivery Dashboard
Robot Status Dashboards
Delivery Error Dashboard
Internal Testing Log

```
jannik@quicksilver CSE498 % python3 test.py
E
=====================================================================
ERROR: testLogin (__main__._MagnaMDDTest)
Traceback (most recent call last):
  File "~/Users/jannik/Documents/CSE498/test.py", line 28, in testLogin
    browser.find_element(By.XPATH, self.loginButtonXPath).click()
  File "~/.local/lib/python3.8/site-packages/selenium/webdriver/remote/webdriver.py", line 855, in find_element
    return self.execute(Command.FIND_ELEMENT, {
  File "~/.local/lib/python3.8/site-packages/selenium/webdriver/remote/webdriver.py", line 428, in execute
    self.error_handler.check_response(response)
  File "~/.local/lib/python3.8/site-packages/selenium/webdriver/remote/errorhandler.py", line 243, in check_response
    raise exception_class(message, screen, stacktrace)
(Session info: chrome=111.0.5563.146)
Stacktrace:
0 chromedriver 0x00000000107516428 chromedriver + 4899880
1 chromedriver 0x00000000107493a23 chromedriver + 4364835
2 chromedriver 0x000000001078d0b6f chromedriver + 474182
3 chromedriver 0x000000001071214f0 chromedriver + 750832
4 chromedriver 0x00000000107121751 chromedriver + 751441
5 chromedriver 0x0000000010716834 chromedriver + 1008196
6 chromedriver 0x0000000010714758d chromedriver + 906637
7 chromedriver 0x00000000107162b5b chromedriver + 1018715
8 chromedriver 0x00000000107147333 chromedriver + 906835
9 chromedriver 0x00000000107111155f chromedriver + 685487
10 chromedriver 0x000000001071112a7e chromedriver + 698014
11 chromedriver 0x000000001074e379e chromedriver + 4691870
12 chromedriver 0x000000001074e991f chromedriver + 4712881
13 chromedriver 0x000000001074e9f2f chromedriver + 4739839
14 chromedriver 0x000000001074e985a chromedriver + 4716634
15 chromedriver 0x000000001070abbfe chromedriver + 4630126
16 chromedriver 0x000000001070909c0 chromedriver + 4867848
17 chromedriver 0x000000001070909747 chromedriver + 4847431
18 chromedriver 0x0000000010705187f chromedriver + 4933759
19 libsystem_pthread.dylib 0x00007ff81399e290_pthread_start + 125
20 libsystem_pthread.dylib 0x00007ff81399e67b thread_start + 15

Ran 1 test in 6.082s
FAILED (errors=1)
jannik@quicksilver CSE498 % python3 test.py
.

Ran 1 test in 4.597s
OK
jannik@quicksilver CSE498 %
```
What’s left to do?

• Features
  ▪ Finalize testing requirements and implementation
  ▪ Finalize visualization requirements

• Stretch Goals
  ▪ Improve efficiency of Lambda function
  ▪ UI interface for testing

• Other Tasks
  ▪ Resolve access permissions with Magna AWS
  ▪ Integrate project into Magna’s existing infrastructure
Questions?