

EE / CPR E / S E 492 – [sdmay21-51](#)

Team 51: Constrained Re-Planning in Spatial Crowdsourcing

“Bi”-Weekly Report 2: 02/22 – 03/01

Client &/Advisor: Goce Trajcevski

Team Members:

- Logan Anderson: Frontend/Test Engineer
- Steven Sheets: Backend/Test Engineer, Report Manager
- Nicholas Heger: Frontend Engineer, Progress Manager
- Jared Weiland: Backend Engineer
- James Volpe: Frontend/Backend Engineer

Past Week Accomplishments:

- Generated sample use cases for Dr. Trajcevski to ensure an understanding of how the system should interact with its users. Awaiting his feedback. – Everyone
- Heavy research into Spring Boot and MongoDB. Ran through multiple examples on GitHub. These can be viewed within the commit history on GitLab. – Steven and Jared
- Got backend communication with both retrieving and inserting data into our Mongo database. Can successfully select individual “collections” within our database for different sets of info. – Steven and Jared
- Continued to read documentation and learn how to use Mapbox API and adapt it for React, While Mapbox does have tutorials and examples for basic implementations, it is such a feature heavy API that there is a lot to try and piece together. – Logan
- Continued research into React, decided upon Bootstrap/React-Bootstrap for base UI and react-router-dom for routing, started testing different ways to make functional sign in/up page(s) and general app layout. – Nicholas

Pending Issues:

- Backend and Frontend communication to come - notably want to send data from DB to frontend, run experiments to test how it will be used. Will be discussed in a meeting later this week. - Everyone

Individual Contributions:

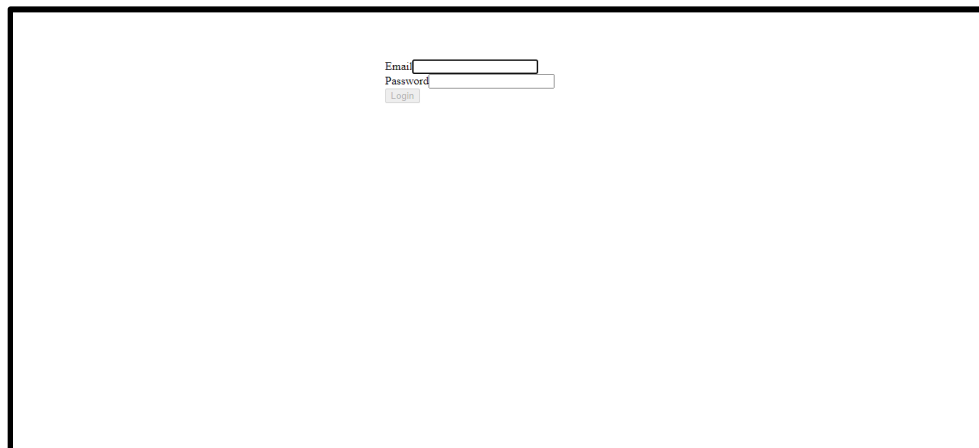
Name	Contributions	Bi-Weekly Hours	Cumulative Hours
Logan Anderson	React, Report	4	18
Steven Sheets	Meeting Organization, React/SB, SB/Mongo, Report	7	19
Nicholas Heger	Use Cases/User Story, React/SB, Report	6	18
Jared Weiland	Server and Database, Report	6	16
James Volpe	React Research, Report	4	14

Plans for Coming Week:

- Meeting with Dr. Trajcevski to inform him of our current progression.
- On the backend side, currently working on creating collections for Workers and Employers, potentially skills and ranking. Will communicate with the whole team to ensure we're on the same page. It is simple to modify collections.
- Finish implementation of basic map system with directions and time estimates.
- Add UI to sign-in/create account page, create home page to send users to after sign in/create account, and link pages together.
- Add user create account validation and hook up with backend.

Some Screenshots:

Basic Sign-in Page Skeleton:



A screenshot of a basic sign-in page skeleton. It features a central area with a white background and a black border. Inside this area, there are two input fields: one for 'Email' and one for 'Password'. Below these fields is a 'Login' button. The text 'Email', 'Password', and 'Login' is displayed in a small, light gray font.

MongoDB Cluster Opening Page

The screenshot shows the MongoDB Atlas interface for a cluster named 'Cluster0' in a sandbox environment. The page includes a navigation sidebar on the left with sections for Data Storage, Security, and Advanced. The main content area displays cluster details such as version (4.4.4), region (GCP / Iowa), and type (Replica Set - 3 nodes). Performance metrics are shown in four charts: Operations (R: 0, W: 0), Logical Size (100.9 KB), Connections (7), and an 'Enhance Your Experience' section with an 'Upgrade' button. A 'Create a New Cluster' button is visible in the top right.

sdmay21-51 Access Manager Support Billing All Clusters Steven

sdmay21-51 Atlas Realm Charts

DATA STORAGE Clusters Triggers Data Lake SECURITY Database Access Network Access Advanced

SDMAY21-51 > SDMAY21-51 Clusters Create a New Cluster

Find a cluster...

SANDBOX Cluster0 Version 4.4.4 CONNECT METRICS COLLECTIONS ...

CLUSTER TIER M0 Sandbox (General) REGION GCP / Iowa (us-central1) TYPE Replica Set - 3 nodes LINKED REALM APP None Linked

Operations R: 0 W: 0 0.04/s Last 6 Hours

Logical Size 100.9 KB 512.0 MB max Last 30 Days

Connections 7 500 max Last 6 Hours

Enhance Your Experience For dedicated throughput, richer metrics and enterprise security options, upgrade your cluster now! Upgrade

System Status: All Good ©2021 MongoDB, Inc. Status Terms Privacy Atlas Blog Contact Sales

Feature Requests

MongoDB Compass-Cluster Connection Opening Page

The screenshot shows the MongoDB Compass interface for a cluster named 'cluster0.pl2aq.mongodb.net'. The left sidebar shows the local environment with 5 databases and 13 collections. The main area displays a table of databases with columns for Database Name, Storage Size, Collections, and Indexes. The 'local' database is highlighted.

MongoDB Compass - cluster0.pl2aq.mongodb.net

Connect View Help

Local 5 DBS 13 COLLECTIONS FAVORITE

HOSTS cluster0-shard-00-01.pl2a... cluster0-shard-00-02.pl2a... cluster0-shard-00-00.pl2a... CLUSTER Replica Set (atlas-n5srmw-... 3 Nodes EDITION MongoDB 4.4.4 Enterprise

Filter your data

admin ames config local test

Databases Performance CREATE DATABASE

Database Name	Storage Size	Collections	Indexes
admin	0.0B	0	0
ames	80.0KB	4	4
config	0.0B	1	0
local	0.0B	7	0
test	20.0KB	1	1

> _MongoSH Beta

MongoDB Compass Ames DB Collection Page

MongoDB Compass - cluster0.pl2aq.mongodb.net/ames

Connect View Help

Local

5 DBS 13 COLLECTIONS

☆ FAVORITE

HOSTS

- cluster0-shard-00-01.pl2a...
- cluster0-shard-00-02.pl2a...
- cluster0-shard-00-00.pl2a...

CLUSTER

Replica Set (atlas-n5srmw-...)

3 Nodes

EDITION

MongoDB 4.4.4 Enterprise

Filter your data

- admin
- ames
 - customers
 - employers
 - traffic
 - workers

+

> _MongoSH Beta

Collections

CREATE COLLECTION

Collection Name ^	Documents	Avg. Document Size	Total Document Size	Num. Indexes	Total Index Size	Properties
customers	2	116.0 B	232.0 B	1	36.0 KB	
employers	0	-	0.0 B	1	4.0 KB	
traffic	4	129.3 B	517.0 B	1	36.0 KB	
workers	0	-	0.0 B	1	4.0 KB	