

## Sprint 2

### Task 239: Research Azure Dev-Ops for sprint planning

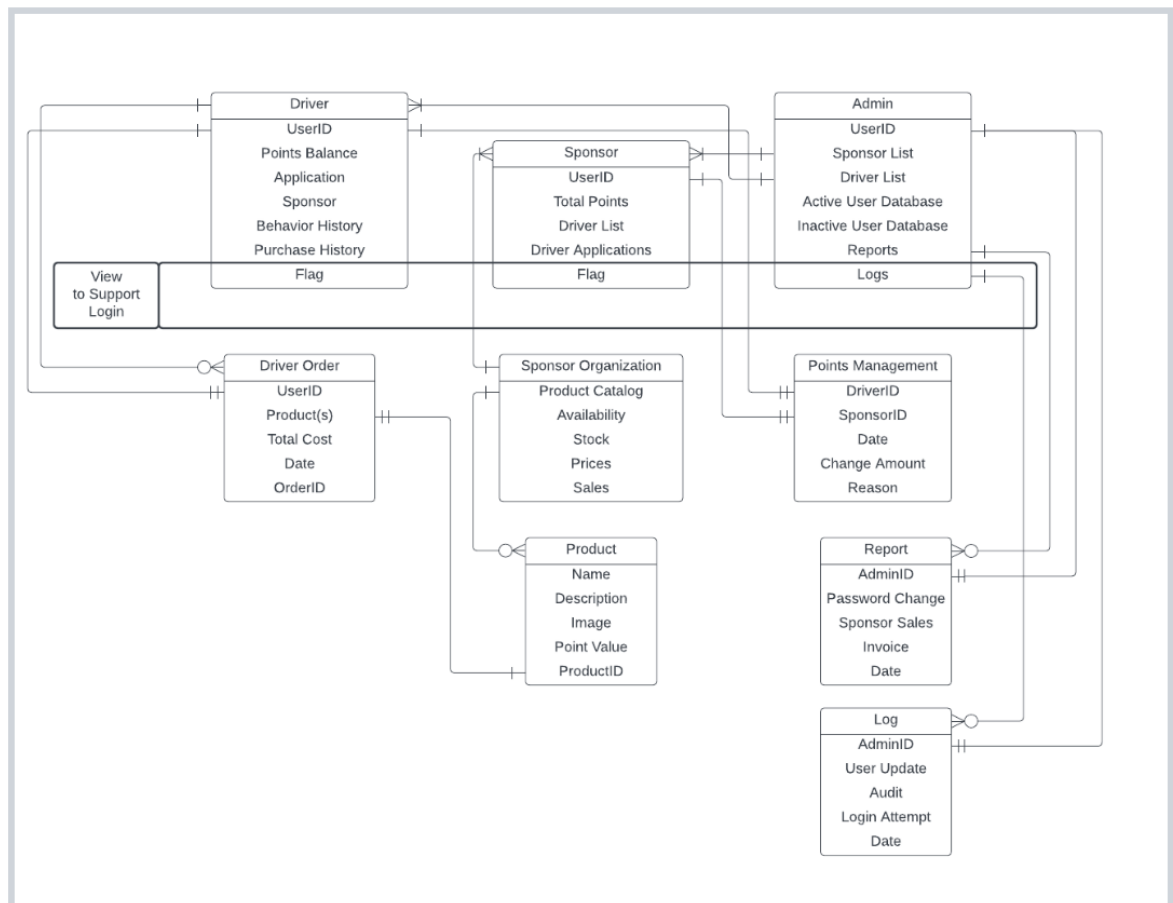
- I have planned the sprints for the past 2 weeks so I am familiar with this technology.

### Task 241: Research Azure Config Control

- <https://learn.microsoft.com/en-us/mem/configmgr/core/understand/configuration-manage-r-on-azure>
- <https://learn.microsoft.com/en-us/mem/configmgr/core/understand/configuration-manage-r-on-azure>

### Task 114: Design a relational database

- Our team decided on the following database schema:



### Task 242: Research SQL databases (MySQL)

- [https://aws.amazon.com/free/database/?trk=83add82a-8e52-4837-bc73-c323da62d78c&sc\\_channel=ps&sc\\_kwid=AL!4422!3!610171867199!e!!g!!aws%20sql%20database&ef\\_id=CjwKCAjwm8WZBhBUEiwA178UnKZZRdQB2CWHsDovWo7cNwI4eOKWLib07vwn1k5JvAEK\\_trwyv4W1xoCtCgQAvD\\_BwE:G:s&sc\\_kwid=AL!4422!3!610171867199!e!!g!!aws%20sql%20database](https://aws.amazon.com/free/database/?trk=83add82a-8e52-4837-bc73-c323da62d78c&sc_channel=ps&sc_kwid=AL!4422!3!610171867199!e!!g!!aws%20sql%20database&ef_id=CjwKCAjwm8WZBhBUEiwA178UnKZZRdQB2CWHsDovWo7cNwI4eOKWLib07vwn1k5JvAEK_trwyv4W1xoCtCgQAvD_BwE:G:s&sc_kwid=AL!4422!3!610171867199!e!!g!!aws%20sql%20database)

- <https://www.hostinger.com/tutorials/what-is-mysql#:~:text=MySQL%20creates%20a%20database%20for,appear%20on%20the%20clients'%20side.>

## Task 60: As a developer, I must set up a Database Management System (MySQL)

team21-database2

Modify

Actions ▼

Summary

DB identifier team21-database2	CPU <div>3.21%</div>	Status Available	Class db.t3.micro
Role Instance	Current activity <div>0 Connections</div>	Engine MySQL Community	Region & AZ us-east-1d

Connectivity & security

Monitoring

Logs & events

Configuration

Maintenance & backups

Tags

Connectivity & security

<div>Endpoint &amp; port</div> <div>Endpoint team21-database2.cobd8enwsupz.us-east-1.rds.amazonaws.com</div> <div>Port 3306</div>	<div>Networking</div> <div>Availability Zone us-east-1d</div> <div>VPC CPSC4910 (vpc-0eb78d7161ea9b5dc)</div> <div>Subnet group default-vpc-0eb78d7161ea9b5dc</div> <div>Subnets subnet-0fc082b026ae29736 subnet-063cda1b3761d33fb subnet-0e326bdb1f73f629c</div>	<div>Security</div> <div>VPC security groups Team21-SecurityGroup (sg-00e383ded312840f9) Active</div> <div>Public accessibility Yes</div> <div>Certificate authority rds-ca-2019</div> <div>Certificate authority date August 22, 2024, 13:08 (UTC-04:00)</div>
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## Task 76: Research Node.js

- [https://www.w3schools.com/nodejs/nodejs\\_intro.asp](https://www.w3schools.com/nodejs/nodejs_intro.asp)
- <https://learn.microsoft.com/en-us/sql/connect/node-js/step-3-proof-of-concept-connecting-to-sql-using-node-js?view=sql-server-ver16>
- <https://docs.aws.amazon.com/elasticbeanstalk/latest/dg/create-deploy-nodejs.rds.html>

## Task 300: Connect Database to application

- Set up an EC2 server for our application
- <https://docs.aws.amazon.com/opsworks/latest/userguide/customizing-rds-connect-create.html>

### **Task 309: Decide on an AWS database to use**

- I decided on MySQL from the walkthrough that we had in class, and utilized the following steps to create it:
  1. Create a managed database service by using an RDS instance.
  2. MySQL as the engine, keep the default current version
  3. Free tier template
  4. Name "Team21-database"
  5. Credentials: auto generate a password to create the master password for the database server. Master username "admin"
  6. Db.t3.micro
  7. SSD gp2 20gb, enable autoscaling
  8. Connect to an ec2 compute resource
  9. Stay in 4910 vpc
  10. Public access = yes (allocates a public IP address)
  11. Create a security group for it... create new "team21-security"
  12. AZ no preference
  13. Database port 3306, keep as default
  14. Password and IAM database authentication
  15. Enable enhanced monitoring?
  16. DB parameter group
  17. Enable automated backups, keep as default
  18. Slow query log, turn all logs on
  19. Enable deletion protection- while this is enabled you cannot delete the database
  20. Create!
- Get access to credentials "view credential details" on blue banner and keep those because once you close the blue banner you can no longer see the password to your database!
- Security group -> Edit inbound rules -> add rule
  - Put in everyone's individual IP addresses or MySQL/Aurora TCP 3306, anywhere 0.0.0.0/0
  - Add a rule that is specific to the web server custom -> ec2 instance security group