**Main:**

Majority of info on deployment is taken from here: <https://learn.microsoft.com/en-us/azure/mysql/flexible-server/tutorial-simple-php-mysql-app>

Github repository:

<https://github.com/benigmatic/cardiac-hemo-php>

Azure PHP app: <https://hemo-cardiac.azurewebsites.net>

To create connection in the workbench:

Hostname: cardiac-hemo-app.mysql.database.azure.com

Port: 3306

Username: comtech

Password: ZureUCF28!

Access to both MySQL and PHP app is public. There is a possibility to add firewall rules to let only certain IP addresses access the apps. This was tested, but during development it was disabled. Some devices were added to the rules, but not all, this needs verification before storing students’ data.

**Additional notes:**

Database used for the project: MySQL version 5.7

SQL authentication for the database:

Admin username: comtech

Password: ZureUCF28!

Note: The Estimated cost is only for the database. The cost is covered for using the free credits given to any student's account for now. Additionally, the MySQL Flexible server is covered by the credits too, but monthly the amount deducted from credits was ~$4. . During production, we can migrate the app to IT from students' accounts.

Setup steps for server and database are taken from: <https://learn.microsoft.com/en-us/azure/mysql/flexible-server/tutorial-simple-php-mysql-app>

As a result, we created a resource group: SD2

It contains three elements: App Service, App Service plan, and Azure Database for MySQL Flexible Server.

**App Service:**

App Service hosts and deploys the PHP application from the Github private repository. The link to the repo is: https://github.com/benigmatic/cardiac-hemo-php

Note: any push to the main branch of this repository would automatically redeploy the application.

The deployment method can be changed in the Deployment center.

URL of the app: <https://hemo-cardiac.azurewebsites.net>

Subscription ID: b44e04ed-53be-4ddc-a15e-c6cfe57b8918

Runtime stack: Php -8.0

**App Service Plan:**

The App service Plan is the lowest possible (cardiac-hemo-app (F1: Free)) , there is a possibility to scale up/out in the App Service Plan.

**Azure Database for MySQL:**

This is the place where that MySQL database is stored.

Note: Not all devices would be able to connect to the database. The connectivity method is selected to be Public access, it takes IP addresses that can access the database. You can add/remove devices in the Networking tab > Firewall rules and add the IP address of the device.

You can access the database through several tools:

1. Using tools like Workbench. Simply create a connection with the database. Has a user friendly interface to access the data in the application.
2. Through the terminal. In the App Service, under development tools, select the SSH tab. Press Go. From there go to the root directory of the app and you can run mysql commands.

**Authentication:**

To create a connection in MySQL Workbench,

Connection method: Standard (TCP/IP)

Hostname: cardiac-hemo-app.mysql.database.azure.com

Port: 3306

Username: comtech

Password:ZureUCF28!

Deployment user:

Username: benigmatic

Password: Orange28!

Other server related info:

**Server name: cardiac-hemo**

**Plan:** cardiac-hemo-app

**Name**: hemo-cardiac

In the App Setting for the App Service, the environment variables has been set to connect the MySQL database with PHP without sharing the variable names on Github:

DB\_HOST="cardiac-hemo-app.mysql.database.azure.com" DB\_DATABASE="cardiac-hemo-db" DB\_USERNAME="comtech" DB\_PASSWORD="ZureUCF28!" MYSQL\_SSL="true"

This allow the app to never use the names directly, to allow for an extra level of security.