Azure Hosting

Data and Web Hosting

Create an Azure Account

Do this on your own time. You get 12 months of free services

Storing Data in Azure SQL Server

Create a database

- Azure Portal - Azure Services - SQL Database
- Create SQL Database
  - Select your current subscription
  - Select your resource group (create if needed)
  - Name Database - DATABASE_NAME
  - Select Server - Create
    - Server Name - server-name-you-chose
    - SQL Authentication only - ADMIN ID - ADMIN PW
  - Change Compute & Storage to "Basic" (BASIC is only for SQL SERVER, use F1(Free) for app service)
    - Data Size 2G
  - Verify Price
  - Create

Connect to your database - Configuration

- Go to your new resource

- Set Server Firewall
  - Selected Networks
  - Firewall rules
    - Add your client IPv4 address (automatically populated)(https://www.showmyip.com/)
    - You will have to add your teammates IP's to give them access
  - **DO THIS: Allow Azure Services to access this server**

Connect to your database - SSMS

- Go to your new resource

- See connection strings

- Copy the server name

- Open SSMS
  - Click "Connect"
  - SQL Server Authentication
    - Login - ADMIN ID
    - Password - ADMIN PW
    - Remember Password
    - Connect
    - You should see your database

Connect to your database - Entity Framework

- Go to your new resource

- See connection strings

- Copy the entire connection string

- Open EF Project

- appsettings.json
    - Paste the connection string
    - Update the password

- Verify with SSMS

- Run the app and test the API

Publishing your API app

Publish your Web API to Azure App Service

- If VS 2022 make sure swagger code is not in (if development environment) Program.cs
- Build - Publish
  - Azure - Create New App Service
    - Click the Green +
    - Name → name-your-service
    - Hosting Plan → New
      - Select $1 hosting plan
      - FREE F1(create new plan) - BE VERY CLEAR ON THIS FOR FINAL PROJECTS
  - Skip API Management
  - Finish
- **Configure Service Dependency (database)**
  - Select Configure
  - Use our Azure database
- Publish

Publish your Web API to Azure App Service

- Make sure the you can get to [app service url]/swagger

- Test the API
  - Swagger
  - Postman

- Angular App
  - Open the App in VS Code
  - Update the Service that calls your API to point to the new URL
  - Run and test the app

Publishing your Angular app

Deploy Your Web App

Create an Azure Web App

- Azure Portal - Create a Resource - Web App

- Name = nameforyourwebapp

- Publish = Code

- Runtime .Net 6

- FREE F1(create new plan) - BE VERY CLEAR ON THIS FOR FINAL PROJECTS

VS Code

- install Azure App Service extension

- click azure button

- sign in to azure - you should see your web app

- BUILD YOUR APP
  - ng build --configuration=production

- Azure → App Service → Expand your Account Name → Right Click your Azure Web App

- Deploy to web app

- dist/**appDirectory** (to change the directory update the .vscode → setting.json file for the project)

- Browse website (give it time to populate data)

- If you get "No permission" you selected "dist" during deployment and not the app directory

Starting Your Project

VS Code

- create new angular app
- create api application in visual studio
- move api solution into angular folder
- update .gitignore to ignore for vs
- use git desktop to push local repo to remote repo - this creates git repo
- add tm's as collabs
- create branch for each person in group including you
- each person will clone each branch, and confirm github on each person computer
- (when changes are ready to be pushed, create pull requests to merge to main)
- DATABASE
  - one person creates DB in azure
  - add IP for each person
  - make sure db is sync in local OR azure db setup WITH azure connection string
  - everyone connect to db in sql management studio