UNIEATS

divplusplus

Infrastructure

Hosting and Scaling:

* Hosted on Azure
  + Free tier limits: 60 CPU minutes per day and 1GB storage
  + Good for hosting small React applications and initial testing
  + Might struggle during peak traffic if there are too many requests
* Scaling
  + No auto-scaling on the current plan of Azure but if needed can upgrade the plan to allow for more storage and more RU/s (Request Units per second)

Security:

* Auth0 to manage user authentication
  + Supports multi-factor authentication and social logins to enhance security
  + JWT: auth0 issues secure JWTs after authentication which the React app can validate
  + Has built-in features such as anomaly detection to monitor
* MongoDB
  + Using MongoDB role-based access control to restrict database operations to specific users
  + MongoDB audit logs track and monitor database activity
  + Network Access on MongoDB allows you to see the IP Address of which user accessed the database when

Reliability:

* Azure
  + Azure App Service (which is where our React app is hosted) offers a 99.95% uptime according to the SLA
  + Azure data centers are organized into availability zones ensuring redundancy and minimalizing downtime
  + Auto backed up every hour
* MongoDB
  + MongoDB achieves high availability through replica sets.