**Week 10 Notes**

Query Optimization

* Tries to do selection first before joining
* SSMS Execution Plan Viewer: analyzes queries
* Allows us to see percentage of time needed per process
* Aim to limit the values of the queries time percentage
* Tips
  + Efficiently joins
  + Optimize WHERE clauses
  + Use proper data types
  + Consider query execution plans
  + Batch queries where possible
  + Avoid nested subqueries
  + Use temporary variables carefully
  + Manage transactions properly
  + Optimize ORDY BY clause
  + Index maintenance
  + Database design considerations

REST API

HTTP Methods

* GET: retrieves all records
* POST: create new record
* PUT: update existing record
* DELETE: delete existing record

Steps

* Docker should be on
* Run properties file
* Create data models
* Create an interface

Postman

* Create connection with backend and database