Information Systems

Course 2/9: Applied Information Systems & APIs

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Prerequisits

- Work in pairs
- Your own laptop with:
  - Test datasets
  - Your favorite programming language
  - **Restfull engine**
  - **GraphQL engine**
  - Datastore with your example

Learning goal: gain experience with difference between RESTful & GraphQL apis

- Goal: **Create RESTful API**
  - Serve data classes based on data-repository
  - Create some example requests

- Goal: **Create GraphQL API**
  - Serve selectable data with nested classes based on data-repository
  - Create some example requests

- Context:
  - Decide which other attributes you want to try out: Security, access, load balancing, etc

- Make things testable
  - Write some test classes to verify your API works correctly

Tasks

- Find a REST library you can use
- Find a graphQL library you can use
- Link these to a data-source
- Create your own data schema and example data
- Write code to link all together
- Write code to perform Rest/GraphQL web-requests and verify the results
- Evaluate differences & experience

Example setup

- NodeJS
  - REST: http & request module
  - GraphQL: graphql module
  - SQLITE database
  - Some users/friends dataset or …
  - Server app to serve endpoints
  - Test app to do requests

Example results

- Example request + response for REST & GraphQL
  - …..
- Zipfile with code
- SWAT analysis of REST vs GraphQL
  - ….
- Paragraph on your learning experience
  - …..
- Which api would you choose, and why?
  - …..