

STARS Web App

CMPT 561 - Homework 4

This is an individual assignment worth 5%. Due date is by 11pm Saturday 20th December 2015. Push your work to Github as you make progress.

1. Requirements

The aim of Homework 4 is to refactor Support & Tracking of At-Risk Students (STARS) App you developed in Homework 3 to use backend REST services using Node.js. The data should be managed in a MongoDB database.

You are required to develop and test the App REST services and database access layer using **Node**. Data should be stored and managed using MongoDB. If the database is empty then it should be initialized when the App starts using the data files provided. You need to create a modular and well-designed App.

When your STARS REST Service is developed and fully tested then you need to change stars-angular2 base solution provided on GitHub to use the REST service instead of the json files / local storage. Also the data filtering must be done on the server side (e.g., get students of current user).

Your implementation should deliver the same use cases as Homework 3:

- **Login and Logout**
- **List of students at risk** under the care of the current user.
- **Add Follow-up Action**
- **List Actions**
- **View, Edit and Delete Follow-up Action.**

2. Grading rubric

Criteria	%
Develop MongoDB models and initialize the database when the App starts using the data files provided.	20
Develop and test STARS REST Service to implement Login, get Students List, get Action Lists, Get/Add/Update/Delete follow-up action and getting other data required for the UI such Action Types.	50
Modify STARS Angular 2 App to use STARS REST service instead of json files or localStorage.	16
Design document showing the solution architecture including the REST service interface and the schema of MongoDB collections and documents.	6
Testing Word documentation with evidence of correct implementation using snapshots illustrating the results of testing.	8
Total	100

Copying and/or plagiarism or not being able to explain or answer questions about the implementation	- 100%
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Ground Rules

- All assignments **must be your own original work**, not based on the work of other students, online examples/tutorials, or any other material from any other source. Any assignments found to be based on work other than your own will automatically be given a **grade of zero**, and may lead to further disciplinary action as per QU policy.
- All assignments must be submitted electronically to Github. You should push your work to Github as you make progress. Late submission policy: 10 points deduction for each late day and 0 after 3 days.