

INFO2602 Project Specification

Introduction

This project will help students to appreciate how we can use the Internet based technologies that can create services that can be useful for helping users with their everyday lives. The project will assess student's ability to utilize the tools and techniques discussed during the course in conjunction with the multitude of resources available to create a software solution to solve the identified problem. In addition to using the tools, students will be required to demonstrate their understanding of the application of the computer science concepts of Modularity, Scalability and/or Extensibility of programs and algorithms in the process of constructing their solutions.

Problem

One of the biggest problem facing our generation is the issue of information over-load. How do we keep track with the abundant data presented to us, while ensure we capture information that is meaningful to us, while hiding or deferring information that is not as important.

Students are required to use the generated twitter stream data and create a service around the api that will present the user with information that is more relevant to them. There are various ways that this can be accomplish however students should observe the criteria for the project to ensure that all areas are considered.

Core learning areas

1. Using REST services
2. Creating REST-based services
3. Using Cloud platform
4. Data Visualization

Breakdown

Category	Specifics	Mark
REST Services	Perform GET request generated from developed API	2
	Perform POST request from developed API	2
	Perform DELETE request from developed API	2
	Create two GET request	2
	Create two POST requests	2
	Create one PUT request	2
	Create one DELETE request	2

Category	Specifics	Mark
	Accept at least two parameters from client	2
	At least two methods should be authenticated	2
	Utilization of session within the developed API	2
Database Connectivity	Successfully connect to database	2
	Create user with associated database	2
	Insert data into the database	2
	Read data from database	2
	Utilization of Limit & Offset	2
Cloud	Successfully deployed to a cloud-based solution (i.e. Heroku, Digital Ocean, Firebase)	5
	Database online	5
	Accessible online	5
Data Visualization	Successfully Implementation of at least one visualization	5
	Applicability to the problem	2
	AJAX based information	5
CS Topic	(Modularity / Scalability / Efficiency / Extensibility)	
	Identification of at least one CS topic	2
	Justification of the design factors selected	10
OR	How well was the idea Implementation	5
IT Topic	Decision making/ business value / transformative effect	
	Identification of IT solution Impact	
	Justification of the design factors selected	10
	How well was the idea Implementation	5
IO Problem	Solution	4
	Innovative	5
	Works as Described	5
Presentation		10

Bonus Marks

1. Make the charts interactive [5]
2. Use Git for deployment [5]
3. Utilize data from a 3rd party service (e.g. open data, twitter, Facebook, YouTube API) [5]

Submission details

Each team is expected to submit the following:

1. The URL where the application is hosted
2. Any credentials required to access the account
3. The code and instruction on running the application
4. The project description file filled with URL and/or file # of the implemented feature (speeds up the marking process, and helps you to ensure you have all things needed to gain the marks)
5. PowerPoint and/or Word document highlighting important areas of the project