



**IN  
PARTNERSHIP  
WITH  
PLYMOUTH  
UNIVERSITY**

# ***Web Development Platforms PUSL2002***

## ***Coursework 2018–2019***

Term: Term 1

Submission Deadline: **TBA**

Coursework Type: Group Assignment

Element of Assessment: C1 & P1

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## Coursework

This coursework for PUSL2002 is worth 70% of the module marks and contains two parts: a project demonstration (individual + group) and a report.

Everyone must form into groups of five (5). Each group must then decide and agree upon which web technology they use, individual roles, and responsibilities.

### A scenario for the project

Colombo Municipal Council (CMC) is planning to launch a web site to optimize garbage collection, where volunteers within district can report thrown away garbage and garbage trucks can collect them.

- The registered members of the Green Task Force (GTF) understood here as the volunteers, can take picture(s) of thrown away garbage, explain the impact such as attracting wild life, terrible smell, etc., set the location, and report this incident.
- CMC has a dedicated Green Captain, a manager who can view all the reported incidents (as shown in Figure 1), validate by looking at the uploaded photo(s), and approve or reject stating how soon the garbage should be cleared.
- Garbage collection staff can see the approved reports with a summary on a Map along with the importance (set by the captain).
- General public can see the garbage collection spots on a map and news articles posted by the CMS.

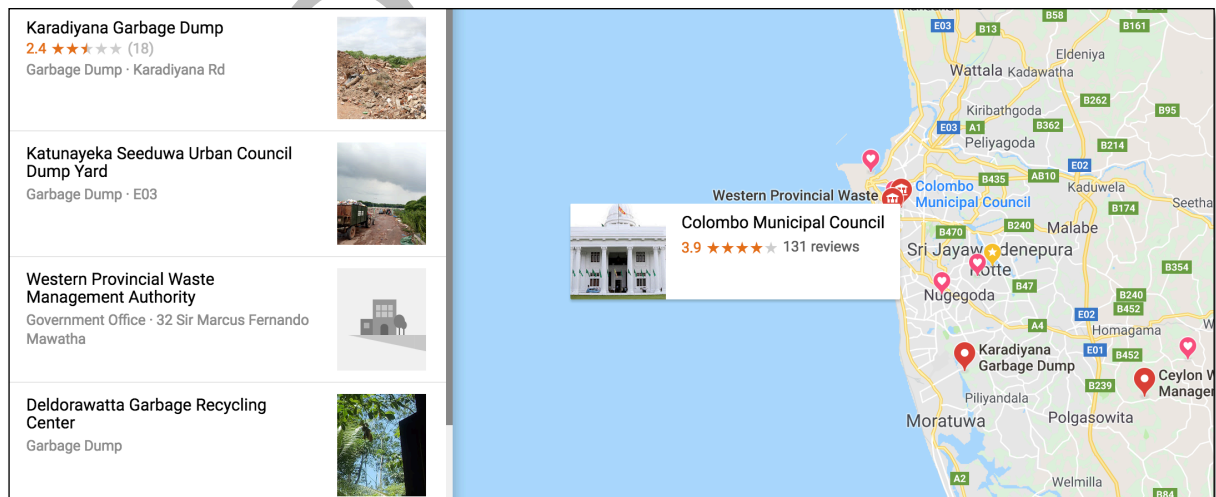


Figure 1. Sample GUI where the captain can see all the reports as a list and a map.

Create a web application using PHP or ASP.NET C# with MySQL/Oracle/SQL Server database to demonstrate the above scenario.

## **Functional Requirements**

- There should be an “Administrator” who can create accounts for the captain and collecting staff.
- Admin can also post articles to improve public awareness about garbage collection and add garbage spots.
- GTF members can signup for free. Registered GTF members can input data (including images), delete and update his/her own incidents.
- Green captain can see the reported incidents as a list and on a map, click to reveal more details on a popup dialog box (similar interface like Figure 1). S/he can then approve/refuse them and set a flag based on importance such as red flag for immediate cleanup.
- Collecting staff can see the approved reports. Different flagged reports are displayed with different icons on a map. More information can be seen when such icon is clicked.
- General public can see the news articles and garbage spots on a map.

## **Preparation and Analysis**

Explain how you plan/analyze the project and distribute workload between yourselves using a storyboard or a user story. Show each member's contribution by writing initials next to the idea/sketch/component.

Note that there are five roles clearly; admin, captain, volunteer, staff, and public.

## **Project Demonstration and Deliverables**

The last two weeks of semester will be devoted to in-class demos. Every group will have to demonstrate their web application all functionalities that they have implemented.

1. Fifteen (15) minutes will be given for each presentation and each member has to present relevant portion of the application which was he/she involved. All the members will be evaluated by a review panel or the module leader asking direct questions during or after the presentation.
2. Deliver a report, which contain your storyboard/user story, screen shots of all pages in your web application, an introduction, discussion about challenges faced, and a conclusion. The cover page should contain your group name and members info.

## Detailed Assessment Criteria

### (C1) Coursework – 50%

Category and Weighting	Marks	LOs
Satisfaction of all functional requirements	25	LO1
Implementation of a server-side web solution using PHP or ASP.NET C#.	15	LO2
Proper integration with the databases	15	LO3
		LO4
Proper integration of Google maps	15	LO1
Demonstration <ul style="list-style-type: none"><li>• Clear understanding and ability to argue and defend</li></ul>	15	LO1
Report <ul style="list-style-type: none"><li>• Professional style of writing</li><li>• Appropriate structure</li><li>• Discussion of challenges faced</li></ul>	15	LO3
		LO4

### (P1) Practical - 20%

Stages	Marks
Contribution to the planning stage as individual	20
Clear presentation regarding individual contribution to the project	20
Overall understanding of the project, quality, completeness and adaptability of individual contribution to the project.	20
In addition to that the impact to the total project to enhance the quality of the solution in different aspects; view, security, efficiency, architecture etc.	20
Addressing arguments arise by the panel and audience	20
Total	<b>100</b>

Individual categories are awarded marks based upon the above criteria.

### Submission Type

The report should be a Word document. Project report should be comprehensive report with minimum number of pages.

Dates	Deliverables
<b>TBA</b>	Project Demonstration
<b>TBA</b>	Report Submission