

Deliverable #1

Group 27

Henry Sazo, Hugo Chacon, Neil Verma, Alice Dao

Table of Contents

I.	Group 27 Information	-----	3
II.	Introduction	-----	4
III.	Requirements	-----	5
	1. Requirement #1		
	2. Requirement #2		
	3. Requirement #3		
IV.	Prospective Schedule	-----	6,7
	1. Deliverable #1		
	2. Deliverable #2		
	3. Deliverable #3		
	4. Deliverable #4		
	5. Deliverable #5		
	6. Deliverable #6		
	7. Deliverable #7		

Group 27 Information

Authors

Henry Sazo [hsazo@usc.edu]

Hugo Chacon [chaconac@usc.edu]

Neil Verma [neilverm@usc.edu]

Alice Dao [alicedao@usc.edu]

Introduction

This project's objective is to develop and integrate a dynamic Esri mapping application into the Assessor Portal, offering support for layers in both REST API and WMTS formats. This application will enhance spatial data visualization and user interaction by utilizing parameters such as assessor identification numbers, longitude, and latitude coordinates. The deliverables include comprehensive design documentation, a fully functional Esri mapping application with REST API and WMTS support, an integration module with tools and protocols for embedding the application into the assessor portal, and thorough testing reports along with an action plan to address any identified issues.

Requirements

Requirement #1: Design an Esri mapping application compatible with the Assessor Portal + AMP Portal.

Requirement #2: Ensure support for both Rest API and WMTS format layers within the map.

Requirement #3: Implement functionality to receive and process parameters (assessor Id, longitude, latitude) through URL.

Deliverables

Deliverable #1:

1. The developers should meet with the stakeholders and discuss the project requirements and set a meeting schedule.
2. The developers should meet with the mentor and discuss the project and deliverables.

Deliverable #2:

Prospective Schedule/Tasks for Deliverable #2

1. The developers should choose their roles and responsibilities for the project from: scrum master, developers, infrastructure.
2. The developers should create a working repository.
3. The developers should create a pipeline for the project.
4. The developers should create a Reactjs/ .NET template project.
5. The developers should research how to render REST and WMTS data in Reactjs.

Deliverable #3:

Prospective Schedule/Tasks for Deliverable #3

1. The developers should set up a public host application so it can be demonstrated on Azure App Services.
2. The developers should host the app on NPM or another package manager so that it can be installed into other applications as a singular component.

Deliverable #4:

Prospective Schedule/Tasks for Deliverable #4

1. Once the application is a NPM package that can be downloaded and installed into an application, there needs to be a way for the user to set up the environment variables to access the mapping API.
2. The developers should develop a layers drop down menu that include a single base layer that must always be selected, zero to several reference layers to be selected, and a reference layer that can be clicked again to toggle it off.

Deliverable #5:**Prospective Schedule/Tasks for Deliverable #5**

1. The developers should develop map interaction, including panning and zooming where users can use double click or wheel scroll to zoom in the map.
2. The developers should develop a new window/new tab button.
3. The developers should develop a zoom in/zoom out button.

Deliverable #6:**Prospective Schedule/Tasks for Deliverable #6**

1. The developers should make sure the map component should be responsive across different screen sizes.
2. The developers should test the application and work on maintenance tasks.

Deliverable #7:**Prospective Schedule/Tasks for Deliverable #7**

1. Finish development of all features.
2. Produce documentation of final result detailing methodology, implementation and changes made to the product.