Deliverable 2

Current Progression

We have switched our testing subject to Mars Map Maker due to dependency issues with Apertium. The structure of Mars Map Maker and methods of testing it are different than our previous experiences but we have found a way to make automated testing feasible. We are currently establishing more candidates for testing inside Mars Map Maker.

Test Case Candidate Surveying

We have read through the Dropdown.js and CardList.js files and have found internal methods that are good candidates for testing, which are listed below. We are looking through FieldCard.js right now to find more candidates.

Test Plan

Our testing approach uses a combination of bash and javascript to create and run the scripts for testing Mars Map Maker. We also use Javascript as our driver because that is the language it is written in. Our first five test cases cover the methods **entWithContent()** from **Dropdown.js** and **typeField()** from **CardList.js**.

Requirements Traceability

Component	Method	Requirement
DropDown.js	Dropdown.entWithContent(objArray)	**entWithContent()** must check an array of JSON objects and return the index of the object that contains a non empty string associated with the key "value" or return -1.
CardList.js	CardList.typeField(text)	**typeField()** must parse text and detect if the string's content is an integer, contains only characters, or is neither/a mix of both and return "number", "text", or "both" respectively.

Schedule

Date	Task	Completion
October 1	Clone the project repository and build it	X
October 12	Create 5 test cases and a detailed Test plan	X
November 5	Design an automated testing framework	
November 17	Create and run 25 test cases with our framework	
November 24	Create repeatable faults in the application and identify tests that are planned to fail	

Hardware and Software requirements

Hardware

Physical machine with resources to run Linux Distribution or physical machine with resources to run Linux distribution via virtual machine.

Software

Ubuntu 20.04.1 or greater or similar Linux distribution
Node Package Manager
Mars Map Maker dependencies installable via npm install command while in its project structure

Systems Tests

Currently Tested

1) Dropwdown.entWithContent Test Cases ID 1 & 2

Test Cases

ID	Component	Requirement	Method	Input	Expected Output
1	DropDown.js	No object found with key of "value" and non empty string pair, return -1.	entWithContent()	[]	-1
2	DropDown.js	No object found with key of "value" and non empty string pair, return -1.	entWithContent()	[{value: ""}]	-1
3	DropDown.js	Object found with key of "value" and non empty string pair, return the last index of the occurence.	entWithContent()	[{value: ""}, {value: "Foo"}]	1
4	CardList.js	Input Value is an integer, return "number".	typeField()	"8"	"number"
5	CardList.js	Input Value is empty string, return "both".	typeField()	"" (empty string)	"both"