**Daily Scrum Meeting Minutes:**

Attendees: Max Leone, Humberto Chacon, Salvador Gandara

Start time: 2:30PM

End time: 2:40PM

Date: Feb 3 2017

<Max Leone>:

* What was done since the last scrum meeting?
* Documenting, making diagrams, use case, sequence, and class diagrams for the first story ("Add Node"). Reading all the guidelines. Prototyping.
* What is planned to be done until the next scrum meeting?
* Implement AI (Car).
* Start by outlining class.
* First steps into implementing visual tool for easy graph creation.
* What are the hurdles?
* Nothing out of the ordinary. Mainly going through the process of the implementation.

<Humberto Chacon>:

* What was done since the last scrum meeting?
* Furthered implementation of Dijkstra.
* Wrote testing code.
* What is planned to be done until the next scrum meeting?
* Upload Dijkstra code to github
* Reading section 1.3 to understand dynamic and versatile approach
* Figure out good algorithm for getting diameter of a graph.
* What are the hurdles?
* Understanding of diameter algorithm.

<Salvador Gandara>:

* What was done since the last scrum meeting?
* Working on making a post endpoint for Hug. Explored the pseudocode for the algorithms.
* What is planned to be done until the next scrum meeting?
* Complete the post endpoint to support JSON input.
* What are the hurdles?
* Formatting the requests. Getting responses.

Attendees: Max Leone, Humberto Chacon, Salvador Gandara

Start time: 2:30PM

End time: 2:40PM

Date: Feb 6 2017

<Max Leone>:

* What was done since the last scrum meeting?
* Made tool for visually creating graph nodes
* What is planned to be done until the next scrum meeting?
* Document current work in mingle, etc
* What are the hurdles?
* Using the new tools, like mingle.

<Humberto Chacon>:

* What was done since the last scrum meeting?
* Re-read section 1.2, read section 1.3, re-read 2.1 and 2.2, read section 3.11
* What is planned to be done until the next scrum meeting?
* Start implementing 3.1
* What are the hurdles?
* Implement neighborhood algorithm to figure out neighborhood of a node in the graph.
* Figure out to turn any graph into graph of diameter power of 2

<Salvador Gandara>:

* What was done since the last scrum meeting?
* Post endpoint for hug that accepts JSON data. Read Algorithms 3.1, 2.1.
* What is planned to be done until the next scrum meeting?
* Explore PyInstaller to package the API for Hug.
* What are the hurdles?
* Dependencies on Hug can complicate PyInstaller.

Attendees: Max Leone, Humberto Chacon, Salvador Gandara

Start time: 2:30PM

End time: 2:40PM

Date: Feb 7 2017

<Max Leone>:

* What was done since the last scrum meeting?
* Documented code.
* What is planned to be done until the next scrum meeting?
* Adding features to visual graph generator.
* Include art assets in order to do scenes.
* What are the hurdles?
* Making it look nice, not an artist.

<Humberto Chacon>:

* What was done since the last scrum meeting?
* Implemented algorithms with and without networkx library
* What is planned to be done until the next scrum meeting?
* Further alg 3.1 with library.
* What are the hurdles?
* Implementing alg. hurdles.

<Salvador Gandara>:

* What was done since the last scrum meeting?
* Installed pyinstaller
* DL git source
* What is planned to be done until the next scrum meeting?
* Update tasks for user stories
* Investigate endpoints for py functions
* What are the hurdles?
* Difficulty calling py functions using HUG API

Attendees: Max Leone, Humberto Chacon, Salvador Gandara

Start time: 2:30PM

End time: 2:40PM

Date: Feb 8 2017

<Max Leone>:

* What was done since the last scrum meeting?
* Finished connecting nodes as neighbors
* Updating all nodes, when moved
* What is planned to be done until the next scrum meeting?
* Design Map background, roads, intersections, etc
* What are the hurdles?
* Learn some Photoshop

<Humberto Chacon>:

* What was done since the last scrum meeting?
* Understand Proof Lemma 3.1
* Convert any graph into form with diameter 2^h to be used by alg
* What is planned to be done until the next scrum meeting?
* Continue with alg 3.1
* What are the hurdles?
* Implementing alg

<Salvador Gandara>:

* What was done since the last scrum meeting?
* Begun integration of the Hug api with Dijkstra algorithm
* Downloading all libraries that are necessary
* What is planned to be done until the next scrum meeting?
* Integrate functions to endpoints
* What are the hurdles?
* Difficulties with function calls

Attendees: Max Leone, Humberto Chacon, Salvador Gandara

Start time: 2:30PM

End time: 2:40PM

Date: Feb 9 2017

<Max Leone>:

* What was done since the last scrum meeting?
* Found out Photoshop is not a good way to make a map through experimentation.
* Generating a mesh based on the path instead.
* What is planned to be done until the next scrum meeting?
* Do research into JSON and try to start communicating with API.
* What are the hurdles?
* Complications with interfacing with the API and JSON.

<Humberto Chacon>:

* What was done since the last scrum meeting?
* Wrote code for alg 3.1
* What is planned to be done until the next scrum meeting?
* Testing alg. Code: edge cases
* Documentation
* What are the hurdles?
* Debugging

<Salvador Gandara>:

* What was done since the last scrum meeting?
* Determined HUG uses persistent objects
* What is planned to be done until the next scrum meeting?
* Parse JSON input to call dijkstra functions
* What are the hurdles?
* Parsing raw JSON into list of list of floats

Attendees: Max Leone, Humberto Chacon, Salvador Gandara

Start time: 2:30PM

End time: 2:40PM

Date: Feb 13 2017

<Max Leone>:

* What was done since the last scrum meeting?
* Documentation
* What is planned to be done until the next scrum meeting?
* Added tasks in mingle
* Started working adding buttons for easy graph manipulation
* What are the hurdles?
* Nothing pops out as a big hurdle

<Humberto Chacon>:

* What was done since the last scrum meeting?
* Documentation
* Fixed bug with Randomized HDS Generator
* What is planned to be done until the next scrum meeting?
* Research Alg 3.3 and 3.4 for user story/tasks for mingle
* What are the hurdles?
* Difficulties understanding alg.

<Salvador Gandara>:

* What was done since the last scrum meeting?
* User story documentation
* What is planned to be done until the next scrum meeting?
* Determine alternative to PyInstaller
* Update Mingle
* What are the hurdles?
* Starting HUG API using PyInstaller Exe

Attendees: Max Leone, Humberto Chacon, Salvador Gandara

Start time: 2:30PM

End time: 2:40PM

Date: Feb 14 2017

<Max Leone>:

* What was done since the last scrum meeting?
* Added buttons talked about previously
* What is planned to be done until the next scrum meeting?
* Add new functionality for connecting nodes
* What are the hurdles?
* How to go about doing this
* Difficulties of overlapping edges in a 2d plane

<Humberto Chacon>:

* What was done since the last scrum meeting?
* Studied alg 3.2 and 3.4
* What is planned to be done until the next scrum meeting?
* Implement alg 3.2
* First, generate HDT using an HDS
* Then, implement projection alg.
* What are the hurdles?
* Algorithms.

<Salvador Gandara>:

* What was done since the last scrum meeting?
* Researched and installed flask
* Decided to use it
* Started porting HUG code to Flask
* What is planned to be done until the next scrum meeting?
* Finish porting HUG code
* Use PyInstaller to deploy flask app
* What are the hurdles?
* Using Flask on windows

Attendees: Max Leone, Humberto Chacon, Salvador Gandara

Start time: 2:30PM

End time: 2:40PM

Date: Feb 15 2017

<Max Leone>:

* What was done since the last scrum meeting?
* Added connect functionality to connect nodes in a graph by selecting the nodes and clicking the button
* What is planned to be done until the next scrum meeting?
* Start working on generating and exporting JSON to send to API
* Research in order to generate the JSON
* What are the hurdles?
* Difficulties in generating JSON from C# arrays

<Humberto Chacon>:

* What was done since the last scrum meeting?
* Generating HDT using an HDS
* Refactored code to be more functional than object oriented, taking the graph as a parameter.
* Difficulties with alg 3.2 where sets in HDS need a representative element
* What is planned to be done until the next scrum meeting?
* Make new object to store set and rep element of set
* Refactor code to use object
* Continue with alg 3.2
* What are the hurdles?
* Alg 3.2 - unforeseen difficulties

<Salvador Gandara>:

* What was done since the last scrum meeting?
* Tried to export flask app using PyInstaller
* Downgraded to Python 3.5
* Explored some alternatives flask and PyInstaller
* What is planned to be done until the next scrum meeting?
* Test Flask with PyInstaller on Py3.5
* Consider alternatives
* See if it’s reasonable to just use a virtual environment, called VirtualEnv
* What are the hurdles?
* Distributing API

Attendees: Max Leone, Humberto Chacon, Salvador Gandara

Start time: 2:30PM

End time: 2:40PM

Date: Feb 16 2017

<Max Leone>:

* What was done since the last scrum meeting?
* Found bugs with connecting nodes and fixed it.
* What is planned to be done until the next scrum meeting?
* Work on JSON and API interface.
* What are the hurdles?
* Prediction with generating JSON lists.

<Humberto Chacon>:

* What was done since the last scrum meeting?
* Implemented alg 3.2
* What is planned to be done until the next scrum meeting?
* Determine why alg. Is generating cycles for it’s paths.
* What are the hurdles?
* Debugging alg.

<Salvador Gandara>:

* What was done since the last scrum meeting?
* Packaged flask API using PyInstaller
* What is planned to be done until the next scrum meeting?
* Explore difference between 1 file and 1 folder for PyInstaller
* What are the hurdles?
* Testing on machine without Python or any packages

Attendees: Max Leone, Humberto Chacon, Salvador Gandara

Start time: 2:30PM

End time: 2:40PM

Date: Feb 17 2017

<Max Leone>:

* What was done since the last scrum meeting?
* Created JSON conversion code to create JSON strings out of C# arrays.
* What is planned to be done until the next scrum meeting?
* Test getting path from JSON
* Work on car AI.
* What are the hurdles?
* Getting cars to handle intersections properly.

<Humberto Chacon>:

* What was done since the last scrum meeting?
* Debugging generation of cycles from alg.
* What is planned to be done until the next scrum meeting?
* Generate graphs to debug visually
* What are the hurdles?
* Complexity in path generation: cycles.

<Salvador Gandara>:

* What was done since the last scrum meeting?
* Got traffic sim API running on flask using single exe
* What is planned to be done until the next scrum meeting?
* Update documentation
* Push code to dev branch
* Investigate Unity integration
* What are the hurdles?
* Return type of path is list of numpy ints

Attendees: Max Leone, Humberto Chacon, Salvador Gandara

Start time: 2:30PM

End time: 2:40PM

Date: Feb 20 2017

<Max Leone>:

* What was done since the last scrum meeting?
* Worked on JSON generation/API.
* Properly loading JSON returned from API JSON format.
* What is planned to be done until the next scrum meeting?
* Continue working and advancing car AI.
* Slow/brake/stop, etc.
* What are the hurdles?
* Physics/AI can be tricky.

<Humberto Chacon>:

* What was done since the last scrum meeting?
* Continue debugging
* Nonexistent edges between 0 and -1
* Converted to infinity
* After conversion netX generated edges even if weight is infinity
* Instead of converting to infinity convert to 0.0
* What is planned to be done until the next scrum meeting?
* Continue to debug
* What are the hurdles?
* Book doesn't specify how to get rep node
* Problem with representative node of each set
* Waiting on response from Kianoosh

<Salvador Gandara>:

* What was done since the last scrum meeting?
* Worked on Documentation, Diagrams, etc.
* What is planned to be done until the next scrum meeting?
* Push code.
* Make new endpoint for Max’s JSON format.
* What are the hurdles?
* Parsing Max’s JSON format.

Attendees: Max Leone, Humberto Chacon, Salvador Gandara

Start time: 2:30PM

End time: 2:40PM

Date: Feb 21 2017

<Max Leone>:

* What was done since the last scrum meeting?
* Worked on car AI, currently working pretty well.
* What is planned to be done until the next scrum meeting?
* Finish controller for simulation that allows you to change the settings of the spawned cars.
* What are the hurdles?
* Too many cars negative affect performance.
* Need to implement object pooling for cars, increasing performance.

<Humberto Chacon>:

* What was done since the last scrum meeting?
* Left alg 3.2 with previous implementation
* Researching alg 3.4
* What is planned to be done until the next scrum meeting?
* Implement alg 3.4
* What are the hurdles?
* Difficulties with alg 3.2 when implementing alg 3.4

<Salvador Gandara>:

* What was done since the last scrum meeting?
* Made new post endpoints for Unity JSON Format
* What is planned to be done until the next scrum meeting?
* Documentation for Packaging API User Story
* Merge to dev branch
* What are the hurdles?
* C#

Attendees: Max Leone, Humberto Chacon, Salvador Gandara

Start time: 2:30PM

End time: 2:40PM

Date: Feb 22 2017

<Max Leone>:

* What was done since the last scrum meeting?
* Scaffolding for API calls.
* Helper functions for JSON output for testing.
* Started working on statistics of simulation at runtime.
* Object pooling.
* What is planned to be done until the next scrum meeting?
* Write the API calls.
* What are the hurdles?
* Have to completely understand the API.

<Humberto Chacon>:

* What was done since the last scrum meeting?
* Nearly finished alg 3.4
* What is planned to be done until the next scrum meeting?
* Finish alg 3.4
* Generate simplest counterexample to see why alg 3.2 generates cycles
* What are the hurdles?
* 3.2 difficulties

<Salvador Gandara>:

* What was done since the last scrum meeting?
* Made a pull request
* Tested API calls with 25 node map
* What is planned to be done until the next scrum meeting?
* Merge code to dev branch
* Documentation
* What are the hurdles?
* Removing Python refs from repo

Attendees: Max Leone, Humberto Chacon, Salvador Gandara

Start time: 2:30PM

End time: 2:40PM

Date: Feb 23 2017

<Max Leone>:

* What was done since the last scrum meeting?
* Set up API calls. (WWW objects in Unity.)
* Debugged it, figured out how it works.
* What is planned to be done until the next scrum meeting?
* Make sure get path works with API.
* Write code that gets all paths for all cars.
* What are the hurdles?
* Uncertain about API calls.

<Humberto Chacon>:

* What was done since the last scrum meeting?
* “Finished” alg 3.4
* What is planned to be done until the next scrum meeting?
* Determine how to calculate alpha
* What are the hurdles?
* Determining what Omega means

<Salvador Gandara>:

* What was done since the last scrum meeting?
* Updated documentation
* Removed build files from repo
* Merged to dev
* Tested on computer without python
* What is planned to be done until the next scrum meeting?
* User stories, documentation, diagrams
* Work with/review c# api calls
* What are the hurdles?
* Difficulties communicating with API

Attendees: Max Leone, Humberto Chacon, Salvador Gandara

Start time: 2:30PM

End time: 2:40PM

Date: Feb 27 2017

<Max Leone>:

* What was done since the last scrum meeting?
* Finished simulator, for now.
* What is planned to be done until the next scrum meeting?
* Research libraries for creating adjacency matrices from real maps.
* What are the hurdles?
* Figuring out which library to use.

<Humberto Chacon>:

* What was done since the last scrum meeting?
* Compressing paths generated by 3.2 to avoid duplicates
* Determined how to generate alpha for alg 3.4
* What is planned to be done until the next scrum meeting?
* Plan for sprint 4
* What are the hurdles?
* None yet

<Salvador Gandara>:

* What was done since the last scrum meeting?
* Researched importing modules from other directories using python
* Changed project structure
* What is planned to be done until the next scrum meeting?
* Changing structure back or exploring alternatives using pyinstaller
* What are the hurdles?
* Referencing a python module in another directory

Attendees: Max Leone, Humberto Chacon, Salvador Gandara

Start time: 2:30PM

End time: 2:40PM

Date: Feb 28 2017

<Max Leone>:

* What was done since the last scrum meeting?
* Added UI to the simulator for selecting spawn rate for cars, and selecting the algorithm.
* Added traffic jam ability to simulate traffic jams in order to add variety.
* What is planned to be done until the next scrum meeting?
* Research nodejs, map libraries, and figuring out GeoJSON.
* What are the hurdles?
* Figuring out right tools to use.

<Humberto Chacon>:

* What was done since the last scrum meeting?
* Planned on how to do Matrix transformation on paper
* What is planned to be done until the next scrum meeting?
* Implement conversion of graph passed to function into size 2n
* Compressing resultant path to remove “out” nodes
* What are the hurdles?
* None foreseen yet

<Salvador Gandara>:

* What was done since the last scrum meeting?
* Used pyinstaller spec file to add reference to python mod in other directory
* Updated pull request and docs
* What is planned to be done until the next scrum meeting?
* Pull changes from dev
* Merge with dev branch
* Research geoJson
* What are the hurdles?
* Understanding geoJson and how to use it

Attendees: Max Leone, Humberto Chacon, Salvador Gandara

Start time: 2:30PM

End time: 2:40PM

Date: Mar 1 2017

<Max Leone>:

* What was done since the last scrum meeting?
* Researched GeoJSON to understand format, etc.
* Researched NodeJS to start basic app.
* What is planned to be done until the next scrum meeting?
* Look into QGIS for filtering GeoJSON.
* What are the hurdles?
* Learning the new libraries and tools.

<Humberto Chacon>:

* What was done since the last scrum meeting?
* Able to convert any given matrix into In-n-Out Matrix
* From generated paths from this graph, extract only nodes represented in original graph.
* What is planned to be done until the next scrum meeting?
* Continue Testing
* Debug Non Power of 2 Matrix issue.
* What are the hurdles?
* 0 weight edges cause issues. Base 1 used instead

<Salvador Gandara>:

* What was done since the last scrum meeting?
* Updated api to avoid looping through list again
* Updated pull request on github
* What is planned to be done until the next scrum meeting?
* Merge pull request
* Research geoJson libs
* What are the hurdles?
* Understanding js libraries

Attendees: Max Leone, Humberto Chacon, Salvador Gandara

Start time: 2:30PM

End time: 2:40PM

Date: Mar 2 2017

<Max Leone>:

* What was done since the last scrum meeting?
* Looked into QGIS to filter GeoJSON. Working perfectly.
* What is planned to be done until the next scrum meeting?
* Researching leaflet.
* Do a small prototype to learn more about it.
* What are the hurdles?
* Learning about leaflet.

<Humberto Chacon>:

* What was done since the last scrum meeting?
* Debugging Non Power of 2 graph. Issue with numpy.float type and modulus operator. Included in branch ‘in\_out\_nodes’
* What is planned to be done until the next scrum meeting?
* Debugging Power of 2 bug,
* Finish code for in-out nodes duplication.
* What are the hurdles?
* Tracking down bug.
* Computational issues with graph

<Salvador Gandara>:

* What was done since the last scrum meeting?
* Merged into dev
* Researched geojson, leaflet, mapzen, and nodejs
* What is planned to be done until the next scrum meeting?
* Continue researching
* Synchronize with other research
* What are the hurdles?
* Understanding geojson format

<Christopher>:

* What was done since the last scrum meeting?
* Research on GeoJson, mapzen, and QGIS
* What is planned to be done until the next scrum meeting?
* Continue research
* What are the hurdles?
* Understanding geoJSon

<Alejandro>:

* What was done since the last scrum meeting?
* Did a document on JSON research and geoJSON.
* What is planned to be done until the next scrum meeting?
* Keep researching.
* What are the hurdles?
* Understanding the overall of the project.

Attendees: Max Leone, Humberto Chacon, Salvador Gandara

Start time: 2:30PM

End time: 2:40PM

Date: Mar 3 2017

<Max Leone>:

* What was done since the last scrum meeting?
* Added timers for debugging client side of simulator.
* Adding additional debugging with logging.
* Continued researching GeoJSON and leaflet.
* What is planned to be done until the next scrum meeting?
* More research into GeoJSON and Leaflet and experimentation.
* Debugging the simulator.
* What are the hurdles?
* Time to learn.
* Putting all the pieces together.

<Humberto Chacon>:

* What was done since the last scrum meeting?
* Moved computation for dijkstra paths to init.
* Makes get\_path constant time
* Allows filtering of nodes for Unity graph from in-out-node graph.
* What is planned to be done until the next scrum meeting?
* Debugging algorithm.
* What are the hurdles?
* Moving computation of all paths into initialization phase affects performance.

<Salvador Gandara>:

* What was done since the last scrum meeting?
* Researched leaflet and mapzen for web apps
* What is planned to be done until the next scrum meeting?
* Make a sample/demo nodejs app using express, leaflet, and mapzen
* What are the hurdles?
* Determining requirements for web app

<Christopher>:

* What was done since the last scrum meeting?
* What is planned to be done until the next scrum meeting?
* What are the hurdles?

<Alejandro>:

* What was done since the last scrum meeting?
* What is planned to be done until the next scrum meeting?
* What are the hurdles?

Attendees: Max Leone, Humberto Chacon, Salvador Gandara

Start time: 2:30PM

End time: 2:40PM

Date: Mar 6 2017

<Max Leone>:

* What was done since the last scrum meeting?
* Researched more NodeJS, might use a different approach for simplicity.
* What is planned to be done until the next scrum meeting?
* Prototype project with leaflet, consisting of moving an object around lines in the map.
* What are the hurdles?
* Familiarity might be an issue.

<Humberto Chacon>:

* What was done since the last scrum meeting?
* Debugged, but didn’t figure out bug with get path calls
* What is planned to be done until the next scrum meeting?
* Start reading 3.2 in book
* What are the hurdles?
* Read up on definitions for review

<Salvador Gandara>:

* What was done since the last scrum meeting?
* Prototyped Node Js app with Express
* Difficulties with leaflet and css.
* What is planned to be done until the next scrum meeting?
* Debug node app
* Attempt to implement leaflet map into node js app
* What are the hurdles?
* Integrating leaflet map in html page via javascript.
* Integrating mapzen data into leaflet map.

Attendees: Max Leone, Humberto Chacon, Salvador Gandara

Start time: 2:30PM

End time: 2:40PM

Date: Mar 7 2017

<Max Leone>:

* What was done since the last scrum meeting?
* Pushed code to github.
* Have basic map layers using MapQuest API set-up.
* Figured out how to get real-time traffic information from MapQuest.
* What is planned to be done until the next scrum meeting?
* Researching MovingMarker.js in order to simulate car movement on map.
* What are the hurdles?
* Understanding responses from MapQuest API in JSON form.

<Humberto Chacon>:

* What was done since the last scrum meeting?
* Reading 3.2, Review section 2.3
* What is planned to be done until the next scrum meeting?
* Continue with 2.3
* What are the hurdles?
* Understanding math terms

<Salvador Gandara>:

* What was done since the last scrum meeting?
* Explored leaflet and leaflet routing machine
* What is planned to be done until the next scrum meeting?
* Explore mapquest API DL git source code
* What are the hurdles?
* Difficulties understand geoJson data and javascript

Attendees: Max Leone, Humberto Chacon, Salvador Gandara

Start time: 2:30PM

End time: 2:40PM

Date: Mar 8 2017

<Max Leone>:

* What was done since the last scrum meeting?
* Researched MovingMarker.js, got a working prototype, not impressed.
* Looking into AnimatedMarker.js as a replacement.
* What is planned to be done until the next scrum meeting?
* Look deeper into AnimatedMarker.js.
* Figure out how to create a node graph using GeoJSON.
* What are the hurdles?
* Manipulating GeoJSON.

<Humberto Chacon>:

* What was done since the last scrum meeting?
* Researched 2.3
* What is planned to be done until the next scrum meeting?
* Continue with 2.3
* What are the hurdles?
* None foreseen.

<Salvador Gandara>:

* What was done since the last scrum meeting?
* Reviewed different map and routing libraries
* What is planned to be done until the next scrum meeting?
* Explore usage of geojson for API calls
* What are the hurdles?
* Creating an adjacency matrix from geojson
* Mapzen metro extracts
* Qgis to filter geojson

Attendees: Max Leone, Humberto Chacon, Salvador Gandara

Start time: 2:30PM

End time: 2:40PM

Date: Mar 9 2017

<Max Leone>:

* What was done since the last scrum meeting?
* Started experimenting with the creation of an adjacency matrix from GeoJSON.
* What is planned to be done until the next scrum meeting?
* Start making API calls with the new code.
* What are the hurdles?
* Number of nodes might stress the algorithm side.

<Humberto Chacon>:

* What was done since the last scrum meeting?
* Continue with 2.3
* What is planned to be done until the next scrum meeting?
* Finish reading 2.3
* Continue with 3.2
* What are the hurdles?
* None foreseen

<Salvador Gandara>:

* What was done since the last scrum meeting?
* Researched geojson from mapzen metro extracts
* Read implementation so far on github
* What is planned to be done until the next scrum meeting?
* Continue understanding implementation
* Look for improvements
* What are the hurdles?
* Parsing geojson efficiently

Attendees: Max Leone, Humberto Chacon, Salvador Gandara

Start time: 2:30PM

End time: 2:40PM

Date: Mar 20 2017

<Max Leone>:

* What was done since the last scrum meeting?
* Pushed update for reducing number of nodes in adjacency matrix.
* What is planned to be done until the next scrum meeting?
* Converting adjacency matrix into JSON format for API usage.
* Test API.
* What are the hurdles?
* API/Algorithm speed.

<Humberto Chacon>:

* What was done since the last scrum meeting?
* Optimized algorithm for init graph
* What is planned to be done until the next scrum meeting?
* Continue with reading section 3.2
* What are the hurdles?
* None yet.

<Salvador Gandara>:

* What was done since the last scrum meeting?
* Researched Kairos API Public and Private Keys
* What is planned to be done until the next scrum meeting?
* Determine how this model will work for our API
* Try to prototype the key server
* Storing and retrieving keys from sqlite db
* What are the hurdles?
* Not sure how it will work
* Depends on a lot of things existing already (for example: graph initialized)
* Deployment

Attendees: Max Leone, Humberto Chacon, Salvador Gandara

Start time: 2:30PM

End time: 2:40PM

Date: Mar 21 2017

<Max Leone>:

* What was done since the last scrum meeting?
* Set up API calls to initialize graph.
* API side has an error on dev branch.
* Uploaded big adjacency matrix in JSON form.
* What is planned to be done until the next scrum meeting?
* Add ability to upload/download adjacency matrix to simulator.
* What are the hurdles?
* Resolving issues with algorithm code.

<Humberto Chacon>:

* What was done since the last scrum meeting?
* Review section 2.3
* Started with 2.4 2.5 and 3.2
* What is planned to be done until the next scrum meeting?
* Finish sections 2.4 and 2.5 trees. Start 3.2
* What are the hurdles?
* Understanding theory.

<Salvador Gandara>:

* What was done since the last scrum meeting?
* Researched using db for python communication
* What is planned to be done until the next scrum meeting?
* Implement db and get a working keystore
* What are the hurdles?
* Communication with db

Attendees: Max Leone, Humberto Chacon, Salvador Gandara

Start time: 2:30PM

End time: 2:40PM

Date: Mar 22 2017

<Max Leone>:

* What was done since the last scrum meeting?
* Added button for downloading adjacency matrix in browser.
* Uploaded the big adjacency matrix to google Drive.
* Set up API call for initializing path.
* What is planned to be done until the next scrum meeting?
* Set up calls for getting paths.
* Create UI option to upload GeoJSON files.
* Test animated markers using get path, if algorithms side works.
* What are the hurdles?
* Issues with algorithms side (bugs).

<Humberto Chacon>:

* What was done since the last scrum meeting?
* Read 2.4 and half of 2.5
* What is planned to be done until the next scrum meeting?
* Finish 2.5
* Help Max with api bugs.
* What are the hurdles?
* Figuring out what’s wrong with init graph.

<Salvador Gandara>:

* What was done since the last scrum meeting?
* Started implementing auth for API Key and ID
* What is planned to be done until the next scrum meeting?
* Try verifying KEYs and IDs with DB
* What are the hurdles?
* Communicating with DB from python

Attendees: Max Leone, Humberto Chacon, Salvador Gandara

Start time: 2:30PM

End time: 2:40PM

Date: Mar 23 2017

<Max Leone>:

* What was done since the last scrum meeting?
* Debugging API issue, missing header on responses.
* What is planned to be done until the next scrum meeting?
* Working on drag and drop functionality for GeoJSON uploads.
* What are the hurdles?
* API calls, issues with responses.

<Humberto Chacon>:

* What was done since the last scrum meeting?
* Debugged Algorithm with Max
* Finish reading 2.5
* What is planned to be done until the next scrum meeting?
* Speak to kianoosh about debugging algorithm
* Continue debugging locally
* Keep reading 3.2 and papers.
* What are the hurdles?
* Understanding complex theories.

<Salvador Gandara>:

* What was done since the last scrum meeting?
* Made API validate key and username using JSON
* Found a tool to put limits on key usage (Flask Limiter)
* What is planned to be done until the next scrum meeting?
* Fix bug with API response object
* Figure out headers for request object from unity and javascript sims
* What are the hurdles?
* Dealing with HTTP requests and response objects

Attendees: Max Leone, Humberto Chacon, Salvador Gandara

Start time: 2:30PM

End time: 2:40PM

Date: Mar 27 2017

<Max Leone>:

* What was done since the last scrum meeting?
* Fixed adjacency matrix issue so that the graph is connected.
* Added test functionality.
* What is planned to be done until the next scrum meeting?
* Finish drag-n-drop functionality for GeoJSON.
* Set up API calls.
* What are the hurdles?
* None at the moment.

<Humberto Chacon>:

* What was done since the last scrum meeting?
* Reading paper.
* Researched cython for optimization
* What is planned to be done until the next scrum meeting?
* Contact Mohsen and/or kianoosh about this sprint.
* Otherwise keep reading paper.
* What are the hurdles?
* Understanding theory.

<Salvador Gandara>:

* What was done since the last scrum meeting?
* Made dev endpoint without security headers
* Abstracted authorization to make a callable function
* What is planned to be done until the next scrum meeting?
* Continue with authorization
* Document and merge code to dev branch
* What are the hurdles?
* Figuring out how to create and store keys for a specific user

Attendees: Max Leone, Humberto Chacon, Salvador Gandara

Start time: 2:30PM

End time: 2:40PM

Date: Mar 28 2017

<Max Leone>:

* What was done since the last scrum meeting?
* Finished drag-n-drop feature.
* Waiting for API calls in order to finish setting them up client side.
* What is planned to be done until the next scrum meeting?
* Fix issue with strongly connected adjacency matrix.
* What are the hurdles?
* Understanding the issue and testing.

<Humberto Chacon>:

* What was done since the last scrum meeting?
* Debugged large matrix to find issue with diameter of graph.
* Read more of paper.
* What is planned to be done until the next scrum meeting?
* Optimize algorithm for alpha padding
* What are the hurdles?
* Bringing down python code to C.

<Salvador Gandara>:

* What was done since the last scrum meeting?
* Updated endpoints to make dev endpoints
* Pushed upstream
* What is planned to be done until the next scrum meeting?
* Merge to dev branch
* docs
* What are the hurdles?
* none

Attendees: Max Leone, Humberto Chacon, Salvador Gandara

Start time: 2:30PM

End time: 2:40PM

Date: Mar 30 2017

<Max Leone>:

* What was done since the last scrum meeting?
* Cleaned up code.
* Added ability to toggle lines.
* Set up API calls.
* What is planned to be done until the next scrum meeting?
* Finish simulation, get paths.
* Make it look like a traffic simulator.
* What are the hurdles?
* Unknown.

<Humberto Chacon>:

* What was done since the last scrum meeting?
* Met with Kianoosh about optimizing algorithm to improve efficiency
* Experimented with this solution
* What is planned to be done until the next scrum meeting?
* Continue trying to optimize/debug algo
* What are the hurdles?
* Algorithm complexity

<Salvador Gandara>:

* What was done since the last scrum meeting?
* Feature documentation
* User Stories
* What is planned to be done until the next scrum meeting?
* Feature documentation
* User Stories
* Debug issues that come up
* What are the hurdles?
* Bugs with API and javascript

Attendees: Max Leone, Humberto Chacon, Salvador Gandara

Start time: 2:30PM

End time: 2:40PM

Date: Apr 3 2017

<Max Leone>:

* What was done since the last scrum meeting?
* Almost finished the browser-based simulator
* Set up the API calls properly
* What is planned to be done until the next scrum meeting?
* Get the graph/API working with the new algorithm (requires work on algorithms side)
* What are the hurdles?
* Waiting for algorithms

<Humberto Chacon>:

* What was done since the last scrum meeting?
* Debugging Algorithms, validation and verification
* Working with large graphs.
* What is planned to be done until the next scrum meeting?
* Debug with small graph that triggers assert bug.
* What are the hurdles?
* Tracking down the cause of the bug.

<Salvador Gandara>:

* What was done since the last scrum meeting?
* Working on feature docs and diagrams
* What is planned to be done until the next scrum meeting?
* Continue working on docs
* What are the hurdles?
* None forseen

Attendees: Max Leone, Humberto Chacon, Salvador Gandara

Start time: 2:30PM

End time: 2:40PM

Date: Apr 4 2017

<Max Leone>:

* What was done since the last scrum meeting?
* Visual updates.
* Added weight coloring to the edges based on road usage due to paths returned.
* What is planned to be done until the next scrum meeting?
* Work on documentation.
* What are the hurdles?
* None.

<Humberto Chacon>:

* What was done since the last scrum meeting?
* Continued debugging issued with non alpha padded graphs
* May have found serious issue with algorithm (doesn’t work with directed graphs)
* What is planned to be done until the next scrum meeting?
* Try to finish the 2 feature docs
* What are the hurdles?
* Trying to draw the diagrams

<Salvador Gandara>:

* What was done since the last scrum meeting?
* What is planned to be done until the next scrum meeting?
* What are the hurdles?

Attendees: Max Leone, Humberto Chacon, Salvador Gandara

Start time: 2:30PM

End time: 2:40PM

Date: Apr 5 2017

<Max Leone>:

* What was done since the last scrum meeting?
* Debugged.
* Cleaned up code.
* What is planned to be done until the next scrum meeting?
* Test algos when finished.
* Debug Unity Sim API Calls
* What are the hurdles?
* Waiting for algorithms.

<Humberto Chacon>:

* What was done since the last scrum meeting?
* Continued debugging algo and discussed solutions with Kianoosh
* What is planned to be done until the next scrum meeting?
* Research/Implement parallelization for scheme generation
* What are the hurdles?
* Python might not be nice

<Salvador Gandara>:

* What was done since the last scrum meeting?
* What is planned to be done until the next scrum meeting?
* We need to keep a separate graph object for each initialize graph API call that doesn’t provide a graph key. A new graph key will be generated for each new initialize graph call, and this key can then later be used when requesting a path.
* What are the hurdles?

Attendees: Max Leone, Humberto Chacon, Salvador Gandara

Start time: 2:30PM

End time: 2:40PM

Date: Apr 6 2017

<Max Leone>:

* What was done since the last scrum meeting?
* Made changes to the unity simulation code.
* Added more features to the unity sim.
* Changed styling of unity sim.
* Fixed non-bidirectional edge issue with graph.
* What is planned to be done until the next scrum meeting?
* Testing of simulators and algorithms.
* What are the hurdles?
* None

<Humberto Chacon>:

* What was done since the last scrum meeting?
* Made changes to the way neighborhood is computed to solve issue with in-out nodes
* Reduced computation required for an algorithm.
* What is planned to be done until the next scrum meeting?
* Test these implementations, optimize where possible.
* What are the hurdles?
* Finding amount of iterations necessary to get near 100 percent success rate.

<Salvador Gandara>:

* What was done since the last scrum meeting?
* Documentation
* User Stories
* What is planned to be done until the next scrum meeting?
* Continue with user story and feature docs.
* What are the hurdles?