COVER PAGE

Team members:

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1. Organizational Context

Name Project	Group 3
Date	2020-05-29
Chair group	Geo-information Science and Remote Sensing (GRS)
GRS Supervisor	Dr.Ioannis Athanasiadis
Start Date Project	2020-06-22
File Name	DataManagementPlan_2.0.doc

2. Description Project

Title	Real indoor 3D visualizations on a 3D map table
Abstract	Although there is enough information on 3D data of buildings from the outdoors, the amount of data on the inside of buildings is rather limited. The goal of this project is to find a way to use this 3D data to create a proper model that can be used by first responders, including a path finding option. Focus will be on a combination of pathfinding and ways to properly visualize the models on different platforms. Additionally, the project will include research on the best ways to execute both the pathfinding and the visualization. The project in total will take eight weeks. The first week will be used for preparation, followed by two weeks spent on the project proposal. During the fourth, fifth and sixth week, the programming and visualization will be carried out, with the seventh and eight weeks being used for wrap-up and delivering the final results. The final deliverables will be a 3D-visualization of a chosen building, as well as a pathfinding app for the victims and a final consultancy report. This report will also include a data management plan, a usability analysis and an acceptance test.

3. Data Management Roles

Who is collecting data?	Group 3 & Harm (Zebedee data)
Who is analysis data?	Group 3
Other	No
Role supervisor	Supervision, no data collection/analysis/storage

4. Project Data

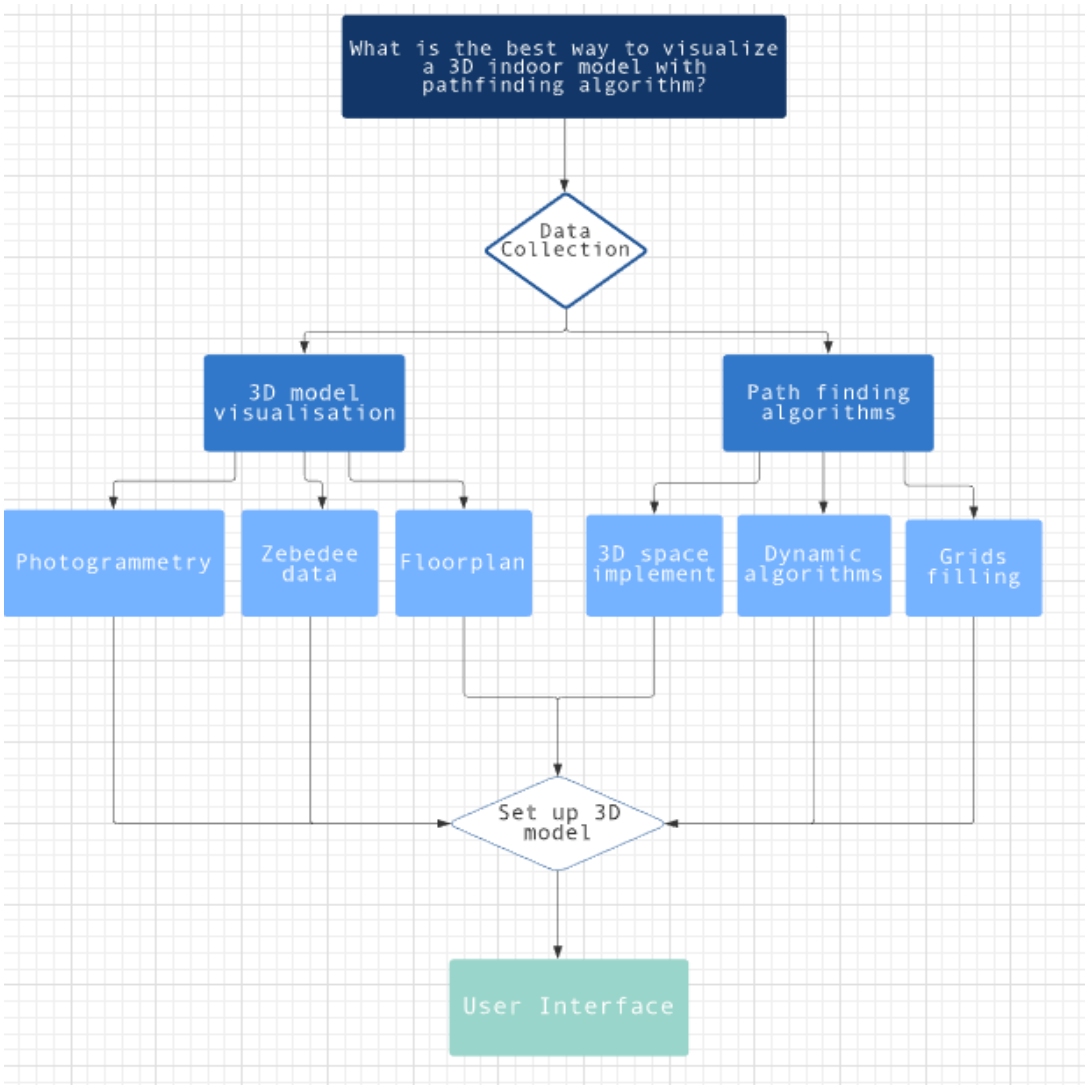
Data stage	**Data type**	**Software choice**	**Data size**
Source data	Camera photos	Meshroom	
	Zebedee data	MeshLab & Blender	537,541KB
	Floorplan	Blender & Unity	4993.03 KB

Result data	3D Gaia model	Blender & Unity	41.7 MB
	UI app	Unity	1,73 GB
Models/code	Gaia Groundfloor model & first floor model	Blender & Unity	50 MB
	Gird for path finding	Unity	216MB
	Path finding algorithms	C# & Visual studio	64.5KB

5. Short Term Storage Solution

Data stage	**Storage location**	**Back up Procedures** (storage medium/how often)
Source Data	Google Drive/ Github	Backup in external hard disk/when needed
Result data	Google Drive/ Github	Backup in external hard disk once a week
Models/code	Google Drive/ Github	Backup in external hard disk once a week

6. Data Structure and Naming Structure



7. Documentation and metadata

Dataset	Content	Context	Process
Camera photos	Images of C0093	Who: Sehan, Rinus, Chenyue Why: for 3D visualisation purpose How: collected by a Canon 80d	Processed by Meshroom Failed to make 3D model
Zebedee	Point cloud of whole Gaia	Who: Tara, Xinzhi, Chenyue, Harm Why: for 3D visualisation purpose How: collected by Zebedee Lidar scanner	Processed by MeshLab and Blender Failed to make 3D model
Floorplan	dwg files of floorplan	Who: Rinus Why: for 3D visualisation purpose	Processed by Blender and Unity Succeed in making 3D model from floorplan

		How: given by Coordinator of Gaia Property Information	
Grids	The grids for presenting the floors and stairs	Who: Xinzhi Why: environment for implement path finding algorithms How: copy paste cubes to the building and avoid the walls	Processed by Unity
Algorithms	Script for path finding	Who: Sehan, Xinzhi Why: To find a path between player and exit dynamically How: Writing codes in Visual Studio	Processed by Visual Studio with C# for Unity environment
Prototypes	Two prototypes: • Exe file • Online file	Who: Rinus Why: for 3D visualisation purpose How: Created by combining all components in unity	Exported from unity using webgl

8. Sharing and Ownership

Sharing and ownership	**With what/who/how**
Data sharing	Data will be shared with CGI afterwards, as well as with any potential clients afterwards.
Data ownership	This depends on the source of the data. 3D data that is created by us will belong to us. If we collect data from other sources, be it CGI or an online source, the data will belong to these parties respectively.
Privacy	Privacy issues could arise if localization methods are used. In this case, the privacy issues are the responsibility of the user, I.e. the buyer of the product.

9. Long term storage

Yes or no?	**Argumentation**
Yes	Our project will be published online in order to be accessible for the coming years.