uOttawa

GNG 1103 – Engineering Design

Deliverable B – Needs Identification & Problem Statement

<u>Team B05</u>

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List of Translated & Prioritized Customer Needs

Below, we have summarized our clients' needs.

Their importance has been judged on a 1-5 scale: 1 being the least important and 5 the most important.

#	Need	Importance
1	Ability to view 3D Building Information Models (BIM) in Visual Augmented Reality	5
2	Compatible with common Mobile Devices (IOS or Android)	5
3	Use Google Cardboard or similar device	3
4	Display markups (dimensions, annotations, etc.)	3
5	Software application must be open source or free to use	5
6	Navigation and interface must be user friendly	5
7	Training and implementation documentation must be provided	5
8	Presented through VR or AR on a mobile device	5
9	Easily operated by any individual regardless of technical skill level	5
10	View the insides of walls to be able to see different electro-mechanical components.	4
11	Available online/offline	4
12	Solution is based on existing free to use software or developed-in house	5
13	Take obstructions into consideration	2
14	Ability to see site even when worker is not present (google maps)	2
15	Be on forefront of technology	3

Legend

Software Needs	User Needs	Additional Requirements

Problem Statement:

Patrick and Kenny, of EllisDon and the Canadian Construction Association need a solution that will allow a construction team on site to easily view multidisciplinary Building Information Models in VR/AR on a mobile device. They require a free, extremely user friendly, and easily compatible software.

Benchmarking of Similar Products

Need #	Metric	Importance	Revizto	PlanGrid	FieldWire
2	Operating System	5	PC, IOS, Android	Windows, IOS, Android	Web IOS, Android
4	Yes/No	3	Yes	Yes	No
7	Yes/No	5	Yes	Yes	Yes
10	Yes/No	4	Yes	Yes	Yes
11	Yes/No	4	Yes	Yes	Yes
13	Yes/No	2	No	No	No

Reflection

It is with great conviction that we believe we were able to successfully empathize with our clients and fully understand their problem at hand. After our meeting with them and our own interpretations of their information, we firmly believe that we effectively analyzed their needs and conclusively prioritized them. Beforehand, we were quite confused on the actual project required and what we were being asked, however once we met with Patrick and Kenny, we were provided with a clear directive. As such, we understand that the fundamental issue is in creating a software where a construction team will be able to view multidisciplinary Building Information Models on site. Thus, we have begun a thorough process to evaluate the clients' needs and ensure that we can provide the best, most effective, and most realistic solution.