

Augmented Reality Sandbox

Dec 2, 2017

Senior Design Group

Project manager

Nathan Schram

Project dates

Sep 18, 2017 - Jan 16, 2018

Completion

33%

Tasks

30

Resources

3

Augmented Reality Sandbox

Project Progress Tracking

Group Members: N. Schram, R. Heifferon, R. Butler

Tasks

2

Name	Begin date	End date
Project Kickoff	9/18/17	10/6/17
Project Directives <i>SENIOR DESIGN I</i> <hr/> <i>Group Members:</i> 1. Nathan Schram 2. Ryan Heifferon 3. Randy Bulter <i>Welcome Gentlemen,</i> <i>This is going to be the working Gantt software that we use to track every step of our progress through the entire semester. I have created the general structure for each thing that is required this semester (with the exception of the individual assignments).</i> <i>To differentiate our tasks and progress through individual tasks, I have assigned a color to each of us:</i> 1. N. Schram - Purple 2. R. Heifferon - Orange 3. R. Butler - Green <i>Individual Task Notes:</i> <i>It is required that you write a brief summary of the task as you work on or complete you assigned tasks. This does not have to be extremely verbose, but something so that the group can see what you are working on and how it is going. This is done in the "Edit Notes" section to the right.</i>	9/18/17	9/18/17
Define Problem <i>2017-NOV-30:</i> <i>Redefinition of our original problem is completed and located in the project requirements document</i>	9/25/17	9/27/17
Develop Requirements <i>2017-NOV-27:</i> <i>First pass of the software requirements document has been completed. Posted to google drive but have not heard back any feedback from the group. I will try and wrap that up this week.</i> <i>2017-DEC-02:</i> <i>The final requirements document has been completed. The last section of which contains best software practices that we will use to write code for the project. This document also contains the problem statement, assumptions and constraints all in one place.</i>	9/28/17	10/6/17
Develop Constraints <i>2017-NOV-30:</i> <i>Project constraints are rolled into the requirements, as they are for the most part the same thing. Any unique constraints that develop separately from the requirements will be mentioned verbosely.</i>	9/28/17	10/2/17
Develop Concepts	10/17/17	10/24/17
Brainstorming	10/17/17	10/17/17

Tasks

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Name	Begin date	End date
Mind-Map	10/18/17	10/18/17
Functional Analysis	10/19/17	10/19/17
TRIZ	10/23/17	10/23/17
SCAMPER	10/24/17	10/24/17
Select Concept	10/30/17	11/1/17
Six Hats	10/30/17	10/30/17
Weighted Analysis	10/31/17	10/31/17
ROM Cost	11/1/17	11/1/17
Patent Search	11/2/17	11/2/17
Analyze Risks	11/3/17	11/3/17
Risk Radar	11/3/17	11/3/17
Preliminary Design	11/6/17	11/13/17
Layout Drawing	11/6/17	11/6/17
2017-NOV-29: Completed the block diagram. I assume that was what this was meant for. A more detailed schematic style diagram will be created in Altium but will be documented under the "Detailed Design" section/OrCad.		
Master Equipment List	11/8/17	11/8/17
2017-NOV-30: Completed the bill of materials for the project. I broke the document down into two sections: prototype and final production. The final costs of the production unit is roughed in for materials but not for costs. Once the final mechanical design pieces are done we can estimate the final costs.		
Power Profile	11/13/17	11/13/17
2017-NOV-30: Power profile of primary equipment has been complete. As this project is primarily a software related project, only the main components have been calculated for power consumption: 1. Laptop computer 2. RGB+D Camera 3. Digital Projector 4. 3D Printer		

Tasks

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Name	Begin date	End date
Analysis	11/14/17	11/14/17
Intermediate Design	11/17/17	11/17/17
Architecture	11/17/17	11/17/17
2017-NOV-29: Software architecture document completed. Will go over the document with the group at our next meeting.		
Detailed Design	11/20/17	1/15/18
Altium Schematic	11/20/17	11/20/17
2017-NOV-30: Completed the electrical schematic in Altium designer.		
Matlab	11/22/17	11/22/17
2017-NOV-30: The Matlab section of code is being marked as complete as the only use for this software is going to be in post processing of data for the 3D plot. It is likely that this will be done entirely in Python and will not be implemented at all.		
Final Presentation	11/24/17	11/28/17
Software	12/18/17	1/15/18
2017-NOV-29: This is the actual start of developing the software. This is not scheduled for the fall 2017 term but is something I will start working on over the winter break.		

Resources

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Name	Default role
Nathan Schram	project manager
Ryan Heifferon	undefined
Randy Butler	undefined

Gantt Chart

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