

Major milestones:

Complete foundational research - complete the research as listed in our tasks, this includes, VR Sickness, implementation of multiple programming languages in Unity, online functionality within Unity, Unity VR Packages, copyright issues with AI, DALL-E and other similar AI art-generating programs, AI/ML algorithms and other AI art-generating programs.

Creation of the gallery - a walkable 3D layout of where the user will experience the environment

Completion of the AI art generation - AI can functionally create an image

Completion of first “demo” build - a small functioning version of the final program, will not showcase many artworks but will contain all of the basic functions we expect from the final project

Completing the project - Finished completing and testing of all of the project deliverables. At this point it should be ready for presentation

Project deliverables:

Functioning VR Application - The full application that should run on it's own, would contain all of the code and assets and would allow the user to run it through a VR headset to enter the gallery, create art and begin exploring

Health Information Document/Waiver - A document explaining the health effects of using VR, such as motion sickness, that potential users will need to read and sign off on before being allowed to use the VR headset and accompanying VR application.

Copyright Legal Document - Any documentation specifying who the generated art would technically belong to, either the app (AI) or the User who generated it

Table 1. Timeline:

Milestone	Task	Start	End	Primary Team Member
1	Research	10/15/22	1/9/23	All
1.1	Research VR sickness and its effects on individuals who may use the application.	10/15/22	11/12/22	Rachel
1.2	Research the implementation of multiple programming languages in Unity	11/12/22	1/9/23	Rachel
1.3	Research online functionality within Unity	11/12/22	1/9/23	Rachel
1.4	Investigate copyright issues with AI generated imagery	10/15/22	11/7/22	Scott
1.5	Research Unity's VR packages	10/31/22	11/7/22	Scott

1.6	Research DALL-E and other similar AI art-generating programs	10/15/22	11/5/22	Nishidha
1.7	Research libraries that can be used in the program	11/5/22	11/26/22	Nishidha
1.8	Research AI/ML algorithms and techniques needed for the program	11/26/22	12/17/22	Nishidha
1.9	Obtain general VR info from Asst Prof Jillian Aurisano (https://research.directory.uc.edu/p/aurisajm)	10/15/22	11/7/22	Scott
2	Creation of the Gallery	1/9/23	4/1/23	Scott, Rachel
2.1	Design the layout of the VR museum	1/9/23	1/25/23	Scott

2.2	Develop the logic for hands/pointer/the means for users to interact with environment	1/9/23	4/1/23	Scott
3	Completion of AI Art Generation	1/9/23	4/1/23	Nishidha, Rachel
3.1	Develop an AI art-generating program	1/9/23	4/1/23	Nishidha
3.2	Merging AI and VR programs	2/13/23	4/1/23	Rachel
3.3	Test the program as it goes through development and document any errors or improvements that need to be made	1/9/23	4/1/23	Rachel
3.4	Refine the code based on errors	1/9/23	4/1/23	Rachel

	found while testing			
3.5	Obtain licenses to use existing libraries in program	1/16/23	4/1/23	Nishidha

Table 2. Effort Matrix:

Milestone	Task	Rachel's Contribution	Scott's Contribution	Nishidha's Contribution
1	Research	33%	33%	33%
1.1	Research VR sickness and its effects on individuals who may use the application.	100%	0%	0%
1.2	Research the implementation of multiple programming languages in Unity	80%	20%	0%
1.3	Research online functionality within Unity	80%	20%	0%
1.4	Investigate copyright issues with AI generated imagery	0%	100%	0%
1.5	Research Unity's VR packages	20%	80%	0%

1.6	Research DALL-E and other similar AI art-generating programs	20%	20%	60%
1.7	Research libraries that can be used in the program	0%	0%	100%
1.8	Research AI/ML algorithms and techniques needed for the program	25%	25%	50%
1.9	Obtain general VR info from Asst Prof Jillian Aurisano (https://research.directory.uc.edu/p/aurisajm)	33%	33%	33%
2	Creation of the Gallery	10%	90%	0%
2.1	Design the layout of the VR museum	10%	90%	0%

2.2	Develop the logic for hands/pointer/the means for users to interact with environment	10%	90%	0%
3	Completion of AI Art Generation	35%	15%	50%
3.1	Develop an AI art-generating program	20%	0%	80%
3.2	Merging AI and VR programs	100%	0%	0%
3.3	Test the program as it goes through development and document any errors or improvements that need to be made	66%	33%	0%
3.4	Refine the code based on errors	50%	25%	25%

	found while testing			
3.5	Obtain licenses to use existing libraries in program	0%	0%	100%