

Milestones:

1. Climbing Visualization. This will be how we will represent the optimal path to the climber. Current idea is to use a stick figure overlaid on the provided picture. If time doesnt allow we will have some sort of still image that will highlight the next hold and relate it to the limb that needs to be moved.
2. Pathfinding AI: Using an algorithm such as A* to solve the problem of giving the user the best path up. This will include a heuristic incorporating factors such as height and preferred hold type to best cater solutions.
3. App layout and UI: This will be on deciding what kind of layout or design is required for the application.
4. Image processing: This recall on how the images will be taken for the image processing.
5. Database and data management: User info and data will be stored in a secure database to be accessible.
6. Environment: researching and using an environment which will be more simple and easy to understand and available.
7. App Deployment: All the processes around getting the app available on the store to be used.

Timeline:

Milestone No.	Task Id	Effort	Start	End	Primary Party
Environment Setup	Best environment available for app development	100%	9/2/2024	9/16/2024	Oankar
	1)Download the environment	100%	9/2/2024	9/9/2024	Oankar
	2) Research	100%	9/2/2024	9/9/2024	Oankar
	3) Testing	100%	9/9/2024	9/16/2024	Oankar

Pathfinding AI					
	1. Research Path planning algorithms	25% each	9-26-24	10-2-24	Everybody
	2. Develop Heuristic for A*	Ethan(75%) Tristan(25%)	10-3-24	10-10-24	Tristan, Ethan
	3. Develop a prototype for the pathfinding	100%	N/A		Tristan
	4. Test prototype and document results	100%	N/A		Tristan
	5. Refine prototype	100%	N/A		Tristan
	6. Begin finalizing development of final path planning	100%	N/A		Tristan
App UI					
	1. Research and Document how best to implement basic app UI	50%-50%	10/21/2024	10/28/2024	Oankar,Ethan
	2. Implement basic app UI	100%	11/7/2024	11/14/24	Oankar
	3. Test UI is functioning properly	100%	11/14/2024	11/21/24	Oankar
Image Processing					
	1. Research and	100%	10-14-24	10-21-24	Ethan

	Document Image Scanning				
	Implement image scanning	100%	10-21-24`	10-28-24	Ethan
	Test image scanning and document results	100%			Ethan
	Research and Document Blob Detection	100%	10/21/24	10/28/24	Ethan
	Implement blob detection	100%	N/A		Ethan
	Test blob detection and document results	100%	N/A		Ethan
Visualization					
	1. Research and Document Tools for Movement Visualization	100%	10-3-2024	10-10-2024	Bridget
	2. Implement movement visualization	100%	N/A		Bridget
	3. Test movement visualization and document results	100%	N/A		Bridget
Database					
	1. Research	100%	10-10-2024	10-17-24	Bridget

	and Document How to store user data				
	2. Implement mechanism for storing user data	100%	10-17-24	10-24-24	Bridget
	3. Test ability to store user data	100%	10-24-24	10-31-24	Bridget
App Deployment					
	1. Research and Document how to get an app on the Google Play store	100%	N/A		Ethan
	2. Implement the necessary protocols to get an app on the app store	100%	N/A		Ethan
	3. Test the app is available and usable from the app store	100%	N/A		Ethan