

Group: 10

Project Title: TrailRider 5.0

Last Week's Goals:

1. To familiarize ourselves with the project documents and create target specifications
2. To begin initial research
3. Set-up online google drive for document storage
4. Create a preliminary Gantt chart to manage upcoming week's timeline

Last Week's Activities:

| Name | Activities | Hours Worked | |
|-------------|--|--------------|-------|
| | | Last Week | Total |
| Andrea | <ul style="list-style-type: none">● Found an article related to the project● Read the project and course guide document | 1 | 1 |
| Carson | <ul style="list-style-type: none">● Found an article related to the project● Read the project and course guide document● Created weekly report | 2 | 2 |
| Julia | <ul style="list-style-type: none">● Found an article related to the project● Read the project and course guide document● Created target specifications and preliminary Gantt chart for weekly report | 2 | 2 |
| Lukas | <ul style="list-style-type: none">● Found an article related to the project● Read the project and course guide document | 1 | 1 |
| Ratthamnoon | <ul style="list-style-type: none">● Found an article related to the project● Read the project and course guide document | 1 | 1 |
| Stephen | <ul style="list-style-type: none">● Found an article related to the project● Read the project and course guide document | 1 | 1 |
| Total | | 8 | 8 |

Summary of progress:

- Many resources have been compiled during class and the team is familiar with the project.
- A google drive has been created and organized into appropriate folders.
- A preliminary Gantt Chart and Target Specifications have been created.

Assessment of Overall Progress:

- The team has not yet met outside of class time. Meetings this week will facilitate productivity and allow the design process to begin.
- Modifications to the target specifications and Gantt Chart may occur in the next week.

Goals for Next Week:

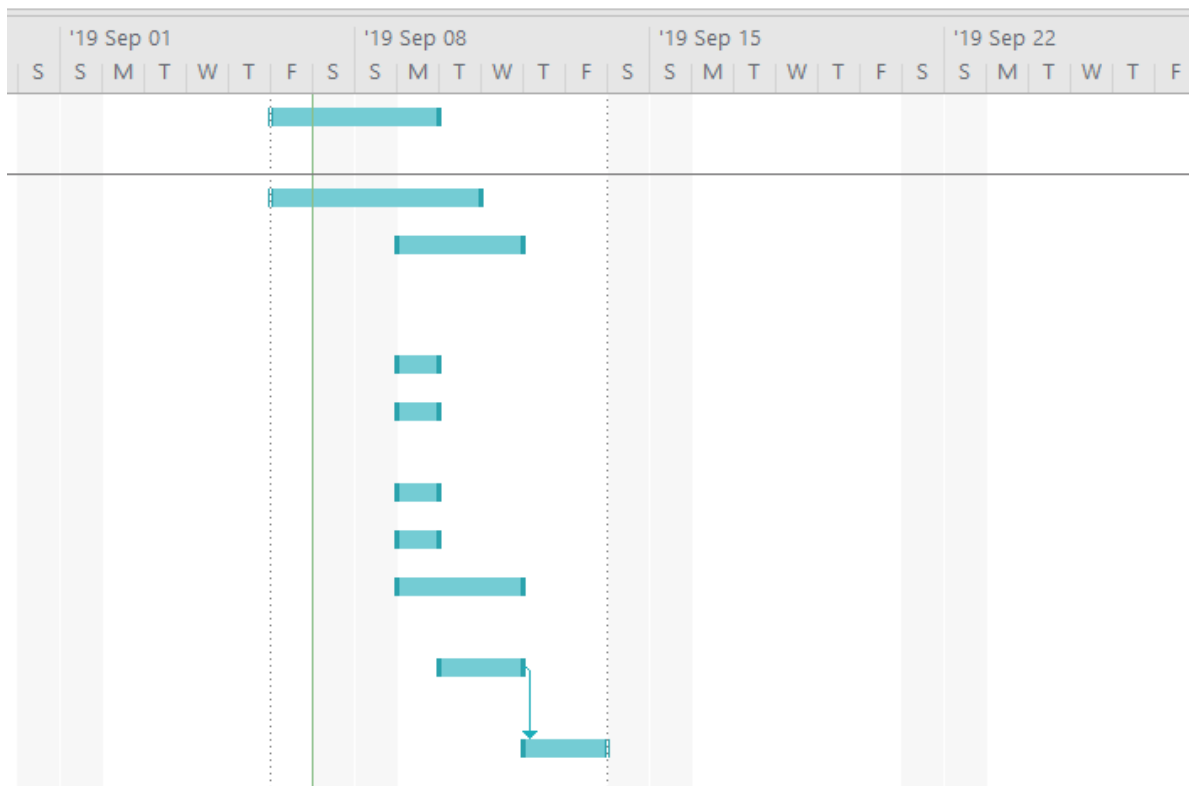
1. To discuss team goals, expectations, strengths and weaknesses. Also to distribute tasks accordingly.
2. To work through an iteration of the design process from finalizing need statements to function generation.

Action Items for Next Week:

| Name | Action(s) | Due Date(s) |
|----------|--|-------------|
| Everyone | Buy a logbook | Sept. 9 |
| Everyone | Discuss team expectations, goals and strengths | Sept. 9 |
| Everyone | Determine who will be responsible for each action | Sept. 9 |
| TBD | Brainstorm needs for the rider, the sherpas, BCMOS, the public and search and rescue | Sept. 9 |
| TBD | Determine the current specifications for the Trailrider (cost, weight, length, width etc.) | Sept. 9 |
| TBD | Estimate the worst-case acceptable value for these specifications with justification | Sept. 11 |
| TBD | Create a high-level Gantt chart with important deadlines to work from | Sept. 9 |
| TBD | Compile interesting/useful resources from class list | Sept. 11 |
| TBD | Perform function decomposition on the Railrider based on needs | Sept. 11 |
| TBD | Begin brainstorming solutions to each function | Sept. 11 |

Preliminary Gantt Chart from Microsoft Project:

| Task Mode ▾ | Task Name ▾ | Duration ▾ | Start ▾ | Finish ▾ | Predr ▾ | Resource Names ▾ | Add New Column ▾ |
|-------------|--|------------|--------------|--------------|---------|------------------|------------------|
| ✚ | Determine current specifications for Trailrider and stakeholder needs | 2 days | Fri 19-09-06 | Mon 19-09-09 | | | |
| ✚ | Create target specifications | 3 days | Fri 19-09-06 | Tue 19-09-10 | | | |
| ✚ | Estimate the worst-case acceptable value for these specifications with justification | 3 days | Mon 19-09-09 | Wed 19-09-11 | | | |
| ✚ | Assign tasks for the week | 1 day | Mon 19-09-09 | Mon 19-09-09 | | | |
| ✚ | Discuss team expectations, goals and strengths | 1 day | Mon 19-09-09 | Mon 19-09-09 | | | |
| ✚ | Buy a logbook | 1 day | Mon 19-09-09 | Mon 19-09-09 | | | |
| ✚ | Create a high-level Gantt chart | 1 day | Mon 19-09-09 | Mon 19-09-09 | | | |
| ✚ | Compile interesting/useful resources from class resources list | 3 days | Mon 19-09-09 | Wed 19-09-11 | | | |
| ✚ | Perform function decomposition on the Railrider based on needs | 2 days | Tue 19-09-10 | Wed 19-09-11 | | | |
| ✚ | Begin brainstorming solutions to each function | 2 days | Thu 19-09-12 | Fri 19-09-13 | 9 | | |



Target Specifications:

| Stakeholder | Notes: e.g. level of influence on project | Needs | | | | Requirements | | | | | Justification |
|-------------|---|----------------|--|---|--|---|----------------------------------|-----------------------------|----------------------------|----------|----------------------------------|
| | | Needs Category | Need as expressed | Explanatory Notes | Need Statement | Metric | | Acceptable Threshold | | | |
| | | | | | | Entity to be measured | Units | Minimum | Maximum | Go/no-go | |
| | | Safety | "Make it safer" | Safety is a priority for the person with disabilities, or else they will not use the device. | The device must be safer than the current design. | Does device prevent falling? | Pass/Fail | | | | |
| | | Ergonomics | "Make it smaller" | A more compact device is more likely to be bought and used more frequently. | The device must be smaller than the current design. | Size | Dimensions (cm) or Volume (cm^3) | | As big as current design | | |
| | | Durability | "Make it stronger" | A device must be able to withstand heavy people and impacts (such as falling) | The device must be stronger than the current design. | Does device withstand impact and high stress? | Pass/Fail | | | | |
| | | Weight | "Make it lighter" | A lightweight device will create less human fatigue for the Sherpas and the rider. | The device must be lighter than the current design. | Mass | kg | | As heavy as current design | | |
| | | Portability | "Improve the device's portability" | A more portable device will be used more often. | The device must be easy to transport. | Is the device easy to transport? | Pass/Fail | | | | |
| | | Cost | "Reduce production cost" | A cheaper device will be more accessible to people in the market. | The device must have a lower production cost. | Production cost | Dollar | | \$7,500 | | Goal is to aim well below \$7500 |
| | | Interaction | "More rider interaction" | A person with disabilities seeks independence and will be more happy to do most of the work themselves. | The rider must have more independence in using the device. | Time of rider interaction during each trip | Hours | >= half the total trip time | Total trip time | | |
| | | Robust | "Improve the device's ability to withstand exposure to water and dirt" | A device that is robust in all weather conditions will be used with more trails and seasons. | The device must remain in quality shape after long exposure to wet and dirty conditions. | Does device maintain quality after severe weather exposure? | Pass/Fail | | | | |
| | | Usage | "Make the device usable by a single 'Sherpa' " | The need for only a single Sherpa is desirable because it is easier to schedule hikes with less people. | The device must be able to be used by a single Sherpa. | Can a single Sherpa use it? | Pass/Fail | | | | |
| | | Regulatory | "Make the device Search And Rescue compatible" | Also important to safety, in the case of emergencies the hikers must be found and carried quickly. | The device must be easily accessible by Search and Rescue members. | Is it compatible with search and rescue? | Pass/Fail | | | | |