## TIME SHEET DESCRIPTION DOCUMENT

Assignment presented to Frank P. Ferrie David Alister Lowther Benoit Boulet

ECSE 211: Design Principles and Methods

Presented by Team 20

Team Number: 20 Date submitted: 11/06/2018

**Specifications:** This document is a description of all the accomplished tasks mentioned in the Gantt Chart and tracked in the Time Sheet.

| Week 1            | Task ID | Justification  |
|-------------------|---------|--|
| Max Brodeur-Urbas | 6       | Brainstormed and got all tasks organized                     |
|                   | 45      | Worked through and organized logic to be coded               |
|                   | 8       | Created Gantt chart and allocated resources                  |
|                   | 7       | Worked as group through fore-sought logical design issues    |
|                   | 39      | Adjusted Preliminary Gantt chart to realistic standards      |
|                   | 40      | Organize and prepare presentation                            |
| Carl El Khoury    | 6       | Brainstormed preliminary software design                     |
|                   | 30      | Worked on Constraints Document                               |
|                   | 45      | Worked collaboratively on soft. logic given requirements     |
| Zakaria Essadaoui | 6       | Brainstormed preliminary software design                     |
|                   | 45      | Worked collaboratively on outline of software structure.     |
|                   | 40      | Contributed to powerpoint presentation content within slides |
| Ayden Malik       | 6       | Brainstormed and researched document structure               |
|                   | 30      | Worked on Capabilities Document                              |
|                   | 40      | Created hardware section of presentation.                    |
|                   | 9       | Drew out teams initial hardware concept                      |
| Ashish Paul       | 6       | Brainstormed and researched document structure               |
|                   | 30      | Worked on System Document                                    |
|                   | 40      | Reviewed documents being submitted for teacher review.       |
| Shaodi Sun        | 6       | Brainstormed and researched document structure               |
|                   | 30      | Worked on Requirements Document                              |
|                   | 39      | Adjusted Budget Collaboratively                              |
|                   | 40      | Reviewed all documents for submission.                       |

| Week 2            | Task ID | Justification  |
|-------------------|---------|--|
| Max Brodeur-Urbas | 539     | Helped code and test improvements in navigation to tree              |
|                   | 70      | Aided with creation of logical flow chart                            |
|                   | 213     | Tabulated all worked hours and justification for each                |
|                   | 76      | Created presentation on powerpoint                                   |
| Carl El Khoury    | 534     | Collaboratively coded logic required to reach tunnel                 |
|                   | 537     | Aided in iterative improvements of tunnel traversal through testing. |
|                   | 539     | Coded repetition of light localization to properly face tree.        |
|                   | 70      | Outlined software logic during flow chart creation                   |
|                   | 59      | Created initial software design document                             |
| Zakaria Essadaoui | 534     | Collaboratively coded logic required to reach tunnel                 |
|                   | 537     | Coded efficient straight traversal of tunnel                         |
|                   | 539     | Coded logic to reach the given coordinates of tree                   |
|                   | 280     | Created Class hierarchy for Software Design document                 |
| Ayden Malik       | 728     | Created 3 proposals and created prototype of selected version.       |
|                   | 58      | Created Hardware Design Documentation                                |
| Ashish Paul       | 60      | Created Testing document   |
|                   | 534     | Aided code improvement by testing navigation efficiency              |
|                   | 537     | Ran robot and reported errors for code improvements                  |
|                   | 539     | Ran robot through tunnel and brainstormed cause of issues.           |
| Shaodi Sun        | 76      | Worked on review and finalization of documents                       |
|                   | 58      | Aided in creation of Hardware Design document                        |
|                   | 213     | Aided in tabulation of hours and gantt improvement                   |

| Week 3            | Task ID | Justification   |
|-------------------|---------|---|
| Max Brodeur-Urbas | 82      | Modelled and constructed ring catching mechanism  |
|                   | 87      | Tabulated and updated hours in spreadsheet.   |
|                   | 92      | Updated Gantt chart with corrections and completion status                                  |
| Carl El Khoury    | 82      | Modelled and constructed sweeping mechanism   |
|                   | 84      | Collaboratively created API docs for submission   |
|                   | 91      | Documented status of code development in software doc                                       |
|                   | 86      | Gathered peer documents to review and improved soft doc                                     |
| Zakaria Essadaoui | 86      | Corrected software doc based on group recommendation.                                       |
|                   | 84      | Collaboratively created preliminary software API in software doc                            |
| Ayden Malik       | 82      | Modelled Integrated gears linking top and bottom catcher.                                   |
|                   | 86      | Reviewed documentation of other groups and adjusted completeness and detail of hardware doc |
| Ashish Paul       | 362     | Updated accuracy and content of testing doc   |
|                   | 254     | Tested and recorded sensor accuracy and applications  |
| Shaodi Sun        | 362     | Aided in documentation of testing and formatting  |
|                   | 87      | Aided in tabulation of hours and tasks performed  |
|                   | 86      | Reviewed submitted documents improved content and uniform formatting.                       |

| Week 4            | Task ID | Justification   |
|-------------------|---------|---|
| Max Brodeur-Urbas | 578     | Coded improvements for navigation to tree                               |
|                   | 268     | Restructured and filled in gaps in hardware document                    |
|                   | 104     | Updated and extended detail of gantt chart                              |
|                   | 114     | Tabulated hours and provided justification for tasks.                   |
| Carl El Khoury    | 99      | Implemented Wifi class in software                                      |
|                   | 96      | Collaboratively coded logic for navigation and ring pickup              |
| Zakaria Essadaoui | 270     | Aided in updating and documentation of testing                          |
|                   | 99      | Implemented wifi class in software                                      |
|                   | 96      | Coded logic for navigation and ring pickup                              |
| Ayden Malik       | 114     | Aided in tabulation of groups tasks and hours                           |
|                   | 264     | Implemented static arms at ideal height                                 |
|                   | 268     | Updated design for week 4 in documentation                              |
|                   | 95      | Evaluated capabilities of current structure and made minor improvements |
| Ashish Paul       | 578     | Ran robot in order to iteratively improve navigation accuracy           |
|                   | 95      | Evaluated constraints of current structure and made minor improvements. |
|                   | 270     | Updated content of testing document and increased detail                |
|                   | 97      | Tested first integration phase  |
| Shaodi Sun        | 268     | Reviewed and improved upon hardware document after restructure.         |
|                   | 270     | Added detail and reviewed testing document                              |
|                   | 264     | Aided in the building static arm  |

| Week 5            | Task ID | Justification   |
|-------------------|---------|---|
| Max Brodeur-Urbas | 463     | Tested the robots abilities as changes were being made  |
|                   | 118     | Updated initial documents updating based on feedback    |
|                   | 505     | Aided with logic of final tree approach coding          |
|                   | 188     | Logged hours and updated Gantt and created presentation |
| Carl El Khoury    | 489     | Improved ring grabbing logic based on demo failure      |
|                   | 505     | Coded final logic for grabbing all four rings           |
|                   | 119     | Simplified and commented parts of code                  |
| Zakaria Essadaoui | 489     | Improved navigation based on tunnel failure in demo     |
|                   | 505     | Coded all possible tree placement cases.                |
|                   | 119     | Simplified and commented parts of code                  |
| Ayden Malik       | 463     | Adjusted Arm structure for more accurate ring grab.     |
|                   | 118     | Updated hardware documents                              |
|                   | 508     | Worked collaboratively on preliminary poster            |
| Ashish Paul       | 118     | Updated testing document                                |
|                   | 188     | Worked on presentation                                  |
|                   | 120     | Directed group during testing.                          |
| Shaodi Sun        | 120     | Tested the robots abilities as changes were being made  |
|                   | 508     | Worked on creating final presentation poster            |
|                   | 118     | Updated initial documentation based on feedback         |

| Week 6            | Task ID | Justification  |
|-------------------|---------|--|
| Max Brodeur-Urbas | 528     | Collaboratively created LDD for poster                   |
|                   | 594     | Restyled and added final content to poster               |
|                   | 198     | Aided with Debugging of final code                       |
|                   | 192     | Reviewed and improved budget from total project          |
|                   | 593     | Structured Final presentation                            |
| Carl El Khoury    | 596     | Aided with final integration testing                     |
|                   | 196     | Completed software document for submission               |
|                   | 593     | Added software related section to presentation           |
| Zakaria Essadaoui | 198     | Finalized source code and corrected performance issues   |
|                   | 196     | Added final content to software document for submission  |
| Ayden Malik       | 528     | Collaboratively created LDD for poster                   |
|                   | 194     | Finalized Hardware document and formatted.               |
|                   | 195     | Aided with completion of testing documentation           |
|                   | 593     | Added hardware section to final presentation             |
| Ashish Paul       | 596     | Directed final integration testing of robots performance |
|                   | 195     | Completed testing document                               |
|                   | 196     | Aided with completion of the software document           |
|                   | 593     | Added testing section of presentation                    |
| Shaodi Sun        | 594     | Tested the robots abilities as changes were being made   |
|                   | 192     | Aided with tabulation of hours and task justification    |
|                   | 199     | Organized files in dropbox for submission                |