

# ***Vehicle-to-Vehicle Update Delivery System***

## **Project Schedule**

Version 1.1

***Updated March 11, 2021***

|                       |                 |
|-----------------------|-----------------|
| <b>Austin Gilbert</b> | <b>#1737454</b> |
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# Capstone I Task List

The following table acts as a comprehensive list of tasks that were completed during our first Capstone in Winter Quarter, 2021:

| Task                     | Pri    | Deadline  | Description   | Status   | Task Lead | Workload | Notes & Links  |
|--------------------------|--------|-----------|---|----------|-----------|----------|--|
| Questions for David      | High   | 1/13/2021 | - A list of Questions to ask David regarding project specifics  | Complete | Everyone  |          |  |
| Set up Github            | Low    | 1/22/2021 | - Set up a Github for all members to collaborate on   | Complete | Cameron   |          |  |
| Create Task Hub          | Medium | 1/22/2021 | - Create a platform for logging tasks and creating new ones   | Complete | Austin    | 7 Hours  |  |
| Fill Task Plan           | High   | 1/25/2021 | - Fill in this Task List with lots of new tasks   | Complete | Everyone  | 1 Day    |  |
| Elect a Team Lead?       | Low    | 1/22/2021 | - Decide if we should elect a team lead to organize tasks and such<br>- If so, decide who that might be         | Complete | Everyone  |          | - Austin will be "Team Lead" aka Task Lead   |
| Decide Research Topics   | High   | 1/25/2021 | - Decide topics to research on and take notes in our Overall Research Document<br>- Find out what we don't know | Complete | Everyone  |          |  |
| Fill out & Read over NDA | Medium | 1/29/2021 | - Read over the NDA<br>- Fill it out  | Complete | Everyone  | 1 Hour   | - Austin will fill out<br>- Sent to David  |
| Decide Meeting Time      | High   | 1/22/2021 | - Decide weekly meeting times with David, Elaine, and Ourselves   | Complete | Everyone  |          | - <b>Weekly Meetings</b><br>- <b>Meetings with Elaine: 4:30 to 5 pm Fridays</b><br>- <b>Meetings with us</b> |

|                              |        |           |   |          |          |       |  |
|------------------------------|--------|-----------|---|----------|----------|-------|--|
|                              |        |           | - Based on when2meet  |          |          |       | <b>Three: 12:15 to 1:15 Wednesdays</b><br><b>- Biweekly with David: 2:30 to 3 pm Saturdays <i>Biweekly</i></b> |
| Research Boards              | High   | 1/29/2021 | - Research what boards will work best for our project   | Complete | Aashi ma |       | - Created doc in "Research" folder for reference   |
| Potential Barriers           | Medium | 1/27/2021 | - Brainstorm the potential barriers in our project  | Complete | Aashi ma |       | - Doing in on "Overall Research Doc"   |
| Research Requirements        | High   | 1/29/2021 | Brainstorm Requirements for boards  | Complete | Everyone |       |  |
| Fill in Overall Research Doc | High   | 2/3/2021  | - Answer Capstone Contract Questions as best as possible  | Complete | Everyone | 1 day |  |
| Make a Giant List of Tasks   | Medium | 2/5/2021  | - Make a list for tasks so that we can create a Gantt Chart<br>- Keep asking yourself "How do we do this task," make smaller tasks like russian dolls | Complete | Everyone |       |  |
| Answer Contract Questions    | High   | 2/7/2021  | - Complete Capstone Contract<br>- Answer questions in paragraph/bullet form<br>- Keep document professional   | Complete | Everyone |       |  |
| Research WiFi Antennae       | Medium | 2/8/2021  | - Research what we need to send/recieve long-range WiFi signals   | Complete | Austin   | 1 day |  |
| Gantt                        | High   | 2/10/2021 | - Complete Gantt  | Complete | Austin   | 1 day |  |

|                           |        |           |  |             |                   |             |   |
|---------------------------|--------|-----------|--|-------------|-------------------|-------------|---|
| Chart                     |        |           | Chart and Schedule   |             |                   |             |   |
| Send/Sign Contract        | High   | 2/10/2021 | - Sign the Contract<br>- Send the Contract to David and Elaine for signatures  | Complete    | Every one         | 1 day       |   |
| Draft External Spec       | Medium | 2/12/2021 | - Make a first draft for external specifications                               | Complete    | Aashima           | A Few Hours |   |
| Draft Internal Spec       | High   | 2/19/2021 | - Make a first draft for internal specifications<br>- Make flow charts?        | Complete    | Aashima & Cameron | 2 days      |   |
| 2nd Draft Internal Spec   | High   | 2/26/2021 | - Remake draft for Internal Spec   | Complete    | Aashima & Cameron | 2 days      | - Looks great!! Thanks you guys!!   |
| "Design Document"         | Medium | 2/19/2021 | - Make a first draft for the design document<br>- Make flow charts?            | Complete    | Cameron           |             | - See info/examples from Elaine<br>- Email/Message Elaine if she hasnt sent these yet |
| Final Draft External Spec | High   | 3/8/2021  | - Final Draft for the External Spec<br>- Share formatting with other documents | Complete    | Every one         | 2 days      |   |
| Final Draft Internal Spec | High   | 3/8/2021  | - Final Draft for the Internal Spec<br>- Share formatting with other documents | Complete    | Every one         | 2 days      |   |
| Schedule                  | High   | 2/21/2021 | - Finish a more comprehensive Schedule Document                                | Complete    | Austin            |             |   |
| Ethics Paper              | Low    | 3/19/2021 | -Write an ethics paper   | Not Started | Austin            |             | - Topic: Right to Repair  |
| Ethics Paper              | Low    | 3/19/2021 | -Write an ethics paper   | Waiting     | Aashima           |             | - Topic: Ethics of Google   |
| Ethics                    | Low    | 3/19/2021 | -Write an ethics   | Not         | Camer             |             |   |

|       |  |  |       |         |    |  |  |
|-------|--|--|-------|---------|----|--|--|
| Paper |  |  | paper | Started | on |  |  |
|-------|--|--|-------|---------|----|--|--|

## Capstone II Gantt Chart

The Gantt Chart on the following page acts as a planned schedule of required tasks for the second quarter of Capstone: the Spring Quarter, 2021. We decided upon a Gantt Chart as a visual scheduling tool as it displays more information space-wise than a simple list of tasks.

Tasks on the Gantt chart are divided into five different phases that will take our team through eleven weeks of progress on the Capstone project, culminating in a virtual presentation and colloquium. Start and Due dates are also shown for each task in numerical form and visual “calendar” form.

[illegible]

[1] Download VSCode, GitHub, FireZilla, Device Drivers (antenna, touch screen, etc.)

Clone GitHub Repository

[2] Send an LED blink frequency across two Raspberry Pis

<https://raspberrypi.hq.com/making-a-led-blink-using-the-raspberry-pi-and-python/>

[3] Transfer files wirelessly from PC to Pi over a wireless Ad Hoc Network.

[4] Transfer files wirelessly from PC to Pi over Ad Hoc connection WITH Antenna and Drivers

[5] Two Raspberry Pi's sending files to one another over an Ad Hoc connection.

[6] Enable recognition of devices through a software handshake.

Enable software to automatically update one another based on version number/date.

[7] Implement the GUI for the touch screen display to be used for user input.

[8] Develop a mobile application to download update files from a phone to the Pi through an Ad Hoc connection.

Design the GUI as well as functionality for testing, including necessary benchmarks

[9] Implement a file transfer program with the mobile application using FileZilla.

[10] Create test plans to squash software bugs.

[11] Perform Debug Test Plans, develop software fixes, test software fixes.

[12] Test the devices at multiple truck stops and busy parking lots.

[13] Test the ease of use of the devices and mobile application with friends and colleagues who will act as new users.

[14] Contact another Capstone team and do a formal design review of each other's work.

[15] Design and create an enclosure for the devices with a \$15 budget.

[16] Create a 30 Minute PowerPoint presentation and practice presenting. We will gradually add to this presentation throughout the quarter but will practice and prepare during the Finalization Phase.

[17] Perform a "dry-run" presentation with PACCAR before presenting at the UWB Colloquium and make necessary changes.

[18] Date is currently unknown but estimated to be during the final week of class. This is where we will present our presentation/poster and our final work. The poster will be virtual and will therefore not cost anything to create.

[19] Via the contract and NDA, we are obligated to turn everything over to PACCAR.