

## Software Project Management - Exercise 1

Choose one of the following two subjects (A or B).

### A. Final project subject:

1. Describe the idea and software project in a single paragraph.
2. What is unique about the project?
3. What are the main mandatory features for the first version? Which features are nice to have? Which features are for future work?
4. Target Audience: Who is going to use your project? Why? Describe 3 different personas, and the needs of each persona.
5. Competition: Who are the top 3 competitors? What do they do well? Provide links to competitors. What are the advantages/disadvantages of the competition?
6. User Stories: draw a story board, and write 5 user stories.
7. Prototype: create a rapid prototype using InVision (sign up for a free trial) including:
  - a. User interface screens.
  - b. User experience, connecting between UI elements and screens, getting from a to b.
  - c. Provide a link to your prototype as well as screen shots.
  - d. Verify that your prototype answers the user stories described, by showing a screen, and answering what it's for?
8. References: provide any references and related links used.

### B. Self-driving car subject:

1. Describe the various benefits of self-driving cars in a single paragraph.
2. Target Audience: Who is going to use self-driving cars? Why? Describe 3 different personas, and the needs of each persona.
3. Competition: Find 5 different self-driving cars online that are currently driving on roads. Provide a link to each. Provide a comparison between the vehicle types, sensors used in each, and stage of on road testing or deployment.
4. Watch the following video <https://vimeo.com/192179727> and describe 8 different visual inputs which are being processed (as shown on the right and bottom parts of the screen).
5. Describe an architecture for fusing these visual inputs together into a meaningful representation and method for learning 3 outputs of steering angle, throttle, and brake (as shown on the left part of the screen). Describe your assumptions.
6. References: provide any references and related links used.