Musts:

1) must be mobile

2) deliver the packages safely

3) move within the medium speed limits

Wants :

1) neat design

2) eco-friendly with no gas emission

3) simple user interface

Assumption :

1) the university network covers the whole campus or at least a 4G connection is available

2) assumes no lock-down or any action that can limit our visits to the targeted campus

3) assumes no temporary change on the campus map

Constrains:

1) the battery life should be enough for at least a single complete back and forth trip.

2) the solution should not open or miss with the shipments.

3) should not create traffic on the operating medium.

Low-level Objectives :

1) save the staff time

2) connect the whole university buildings into a single automated delivery network

3) reduce the car crowds caused by staff members, by delivering their packages instead of using their cars to deliver them in-person.

High-level objectives:

1) push to tech field industry in Saudi Arabia

2) decrease the carbon emission, by reducing the need of using the car to deliver the packages between the buildings

3) improve the movement of the economy inside the campus, by providing the infrastructure for an automated delivery option.

specifications:

Null.

Milestones:

1. Generate different alternatives
2. Evaluate each alternative and choose the best alternative.
3. but the hardware components
4. start working on technical design document
5. Finish the term-1 report
6. term-1 Presentation
7. implement the algorithms
8. test and validate the algorithms
9. finish the artifact
10. finish the report

risks :

1. a team member quits - find another, if not just keep going with two
2. term ends sooner - work for extra hours, fulfill the musts in worst case.
3. shipping issues - find local alternatives
4. the security refuse testing and training the model on campus - formal letter from deanship

problem statement: Create a single and comprehensive delivery network across the KAU campus without human involved.

Responsibility :

Muhannad : navigating algorithms

Sulaiman : Obstacle avoidance algorithms

Wael : hardware & code deployment

Bring more tasks and just through them here.