



Cover page

Project Title: Pet Sitter

Academic Year: 2023 – 2024

Group Members: Wasan Al-Sayed

Department Name: Computer Engineering

Ghena Masri

Project Type: Hardware Project

Supervisor Name: Dr. Aladdin Masri

Format:

- Single space, Times New Roman.
- 12 pt.
- Maximum 1 page.

Abstract Body:

Items must be provided in the Abstract:

- Why do you think this project is important? Please explain the significance of this Project in brief.
- In your point of view what are the important aspects that should be covered in the project?
- Objective(s): In your view, please explain the main objectives of the project.
- Methodology: Give a brief outline of the application development process.
- Had this project been done before? Are there any similar applications available today?
- **Note:** Please deliver this abstract early to ensure that your Project has been approved by the department's projects committee. **Registration will not be done without this approval.**



Project's Abstract:

Our machine is the best solution for you if you have pets at home and you are a person who spend a lot of time outside the home or you travel frequently. Pets require a special care and there are essential needs that should be considered which are their food, water, litterbox and health.

To control all these essentials while you are abroad, we provide a complete implementation that ensures multiple things: serve pets with their daily food meals, keep the water available all the time and filtered also change it if it is impure, the main challenge for pet owners is the litterbox which needs to be cleaned frequently, but in our machine we provide a smart cleaning method without any effort from you by a colander which will clean the sand by extracting the dirt from it and get rid of it. In addition, the health of the pet is the most important part to track while you are outside so we provide a smart pet collar which have multiple sensors to measure the natural signs of the pet and keep the owner updated with the results.

We will let you control everything by a mobile application that allows you to choose the service you want and send notification after done it. For food, you can choose between two categories dry or wet, the quantity according to how many pets you own and the time you want to serve the meal. Regarding the water part, you can control the purity of water and change it when needed by refilling the water bowl. As we mentioned the litterbox has special cleaning method, in addition, you can choose to refill the sand after changing it and keep it at a specific height level. Lastly, you can monitor the health and location of your pet by being notified if the natural signs are getting bad or if your pet is getting away from your area.

After doing our research, we found a similar idea done before but it was a robot that follows the pet and serves it with only food and water. Also, in the market, you may find some solutions that still require physical effort from the owner and do not contain all the services. However, our idea is an enhancement to provide an automated full care system for pets that covers all their needs.