



Cover page

Project title: CatCare

Academic Year: 2023

Group Members: Tasbeh Takrore

Department Name: Computer Engineering

Ayah Shraim

Project Type Software or **Hardware** (Choose one)

Supervisor Name: Dr.Raed Al-Qadi

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:

CatCare is an innovative solution designed to enhance the well-being of cats, addressing the challenges faced by pet owners, particularly regarding their cats' nutrition and hygiene, especially during periods of absence. Cats, cherished for their endearing qualities, often require meticulous care, particularly concerning their dietary and sanitary needs. catCare simplifies these tasks through its smart device. The "catCare Device" empowers users to regulate their cat's feeding with number of meals and real time schedules. It provides real-time alerts for food plate status and allows manual food dispensing. The device also incorporates water sensors to ensure continuous hydration. Furthermore, it facilitates litter box management, including automated cleaning, with status alerts and ability to schedule and inform the daily usage count. In our project, we will focus on the design of the litter box that will be automatically cleaned. We did some research and learned that there are several types of automated litter boxes. We will design a microcontroller box that is cost-effective and feasible. Through the Mobile App and our hardware, real time schedule will be used for feeding and cleaning in addition to manual control. catCare's objective is to alleviate the concerns of cat owners by ensuring their pets are wellfed, hydrated, and provided with a clean litter box. This device enhances feline well-being, even in the owner's absence, making it an invaluable addition for cat lovers.