

**Birla Institute of Technology & Science, Pilani
Work-Integrated Learning Programmers Division
Second Semester 2017-2018**

BITS ZG628T: Dissertation Outline

ID No. : 2016HT12325

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DISSERTATION TITLE : Smart Care - A Smart Solution

Smart Care - A Smart Solution

BITS ZG628T: Dissertation

by

Shital Karhade

(2016HT12325)

Dissertation work carried out at

Cognizant Technology Solutions, Pune



**BIRLA INSTITUTE OF TECHNOLOGY & SCIENCE
PILANI (RAJASTHAN)**

January 2018

Dissertation Details:

1. Proposed topic of Dissertation: **Smart Care - A Smart Solution**
2. Broad Academic Area of Work: **Software Development of Portable Devices**
3. **Background** (Relevance of the project):

At present situation, many people find it difficult to leave their kids or pets alone at home while going to office because there is no one at to take care of them at home. In the continuously growing smart life, we need smart solution to small but important daily needs. Smart Care will help in managing daily needs using smart sensors and some code to control the sensors.

4. **Scope of work:**

Smart Care is the easy and reasonable solution for managing different activities using IOT option. The integration of sensors with household items will help managing different activities without much effort. Smart care application will help to maintain the standard temperature, lights and humidity in the home even when kids or pets are alone at home. Smart care will also take care of the food and water needs for pets based on the proposed times by their owners. This will reduce the risk of losing kids or pets in crowded/public area using comfortable GPS trackers.

5. **Objectives:**

Importance of Smart Care Application:

- ❖ Maintain healthy and comfortable environment to kids/pets by controlling humidity, temperature & lights of home
- ❖ Take care of the food-water requirements of pets throughout the day
- ❖ Track the pets / kids easily in the public area
- ❖ Reduce the stress level of pet maintenance when you are not in home
- ❖ Reduce the manual efforts of maintaining a pet
- ❖ Ensure the safety and food requirements for pets
- ❖ Improve the lifestyle in minimum cost

6. **Plan of work:**

Date	Work Plan
15-01-2018 to 15-02-2018	Project plan, Design pattern need to be selected for the project
16-02-2018 to 15-03-2018	Application implementation and coding as per the plan and design
16-03-2018 to 20-03-2018	Deployment and unit testing
21-03-2018 to 30-03-2018	Best practices used in project and post deployment testing

7. **References:**

1. ARDUINO 1.8.5
2. Raspberry Pi
3. Android Studio

8. **Particulars of the Supervisor and Additional Examiner:**

- i. Supervisor: **Amar Fartare, Senior Associate, Cognizant Technology Solutions, Pune**
- ii. Additional Examiner: **Amit Visal, Associate Director (Principal Architect - Technology) , Cognizant Technology Solutions, Pune**

9. **Remarks of Supervisor:**

Signature of Student

Name: **Shital Karhade**

Signature of Supervisor

Name: **Amar Fartare**

Signature of Additional Examiner

Name: **Amit Visal**