



## Cover page

Project title: **ComfortSense Baby Bed** Academic Year: 2023

Group Members: **Hala Esam Okal** Department Name: Computer Engineering

**Banah Khaled hamdan**

Project Type Software or Hardware (Choose one)

Supervisor Name: Dr . Haya Samaana

### 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:

For our second graduation project, we have brainstormed an idea that aims to provide significant benefits to both babies and their mothers. Our concept revolves around developing an advanced baby monitoring system called "ComfortSense Baby Bed." This innovative system is designed to allow mothers to closely monitor their babies and take necessary actions to ensure their utmost comfort while they are resting in their beds.

In this project we will use an application to make it easier for the mother to track her baby's information around the clock.

So, this application will notify the mother whenever:

- There is a need to change the baby's diapers.
- The baby moves, then there will be a camera that will pass the view to the mother so she can watch her baby.
- Also when he/she cries, in this case she will be given three options the first one is to make the bed swing, the second one is to turn on a musical crib mobile toy and the final option gives the mother the choice to request the bed not to take any action, but let's assume that she was busy and didn't notice the notification, in this case the bed will choose the first option by default.
- The temperature of the room is higher than a specific degree, so a fan attached to the bed will be turned on to cooler the temperature.
- The baby's temperature is out of the normal range.

The application will provide the mother with the temperature of her babe, the temperature of his/her room continuously, either by using the application or by reading the information from the LCD screen that will be provided beside the bed.

And the bed is smart enough to open a cover to protect the baby from the sunlight whenever it senses it.

Another important feature is that there is a button to control the bed swings manually.

