

# EEE-102 TERM PROJECT PROPOSAL

## PLANT CARING

Name: Burak Gökkaya

ID: 22202209

Section: EEE 102-001

### AIM OF THE PROJECT

We are wanted to use BASYS3 and VHDL coding in project so we can improve our abilities. So in this project I want to provide the proper conditions for an plant. Plant caring is hard thing and sometimes there can be bad incidents. For pretending this, first I want to take ideal conditions and then I want to measure the plant's humidity and temperature. Also I want to give signal if there is dangerous wind for the plant. If there isn't enough humidity or there is a hard wind for the plant, system will give the signal to user.

### DESIGN OF THE PROJECT

At the beginning, I need to take ideal conditions for humidity and temperature. And after that I will measure the humidity and temperature of the plant and compare these datas with inputted datas. Also I will create a system with HC-SR04 for the preventing plant from the hard wind. If there is a dangerous wind for plant, system will show the message. As a result of this, I want to display plant's condition (humidity and temperature).

### COMPONENTS

- BASYS 3 FPGA Board
- A Plant
- HC-SR04
- Temperature Sensor
- Humidity Sensor
- Bunch of Jumper Cable
- LCD Screen (if necessary)

### PROGRESS DEMO

For progress demo, I am planning to write the codes and take the inputs and display them on the 7-segment display and LCD screen.

### FINAL DEMO

For the final demo, I am planning to add the wind system, the extra codes and lastly I am planning to check and edit the codes.