



System Programming Project

Finter



Group 1 - Finter

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Features

- Access Point
- Sensors
- LED Indicators
- Auto Fish Feeder
- Touch TFT LCD
- Auto Light Switch
- Water Pump Switch

Access Point

- Wi-Fi Router
- DHCP Server

Sensors

- Ambient Temperature
- Water Temperature
- Light Levels

LED Indicators

- Temperature Warning
- Feeding Status
- Light and Pump Status
- AP Status
- Power

Auto Fish Feeder

- Feed on Interval

Touch TFT LCD

- Current Date and Time
- Time Until Next Feed and Controls
- Water Temperature
- Ambient Temperature
- Lights and Pump Status and Controls
- AP Status

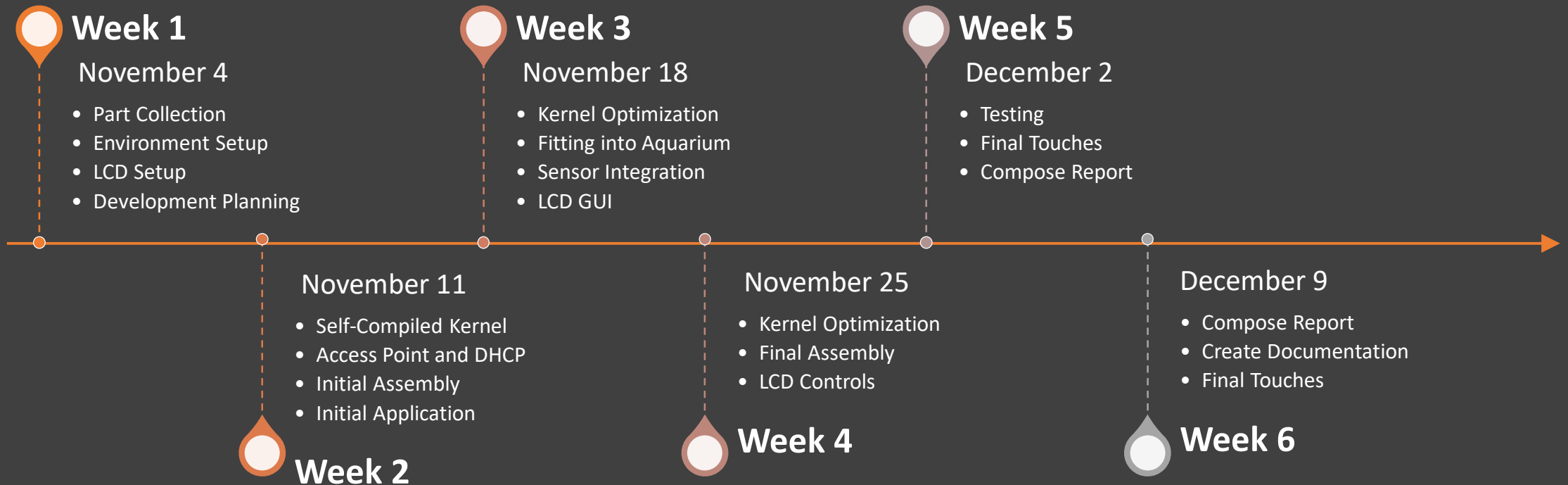
Auto Light Switch

- Auto Ambient Switching
- Manual GUI Switching

Water Pump Switch

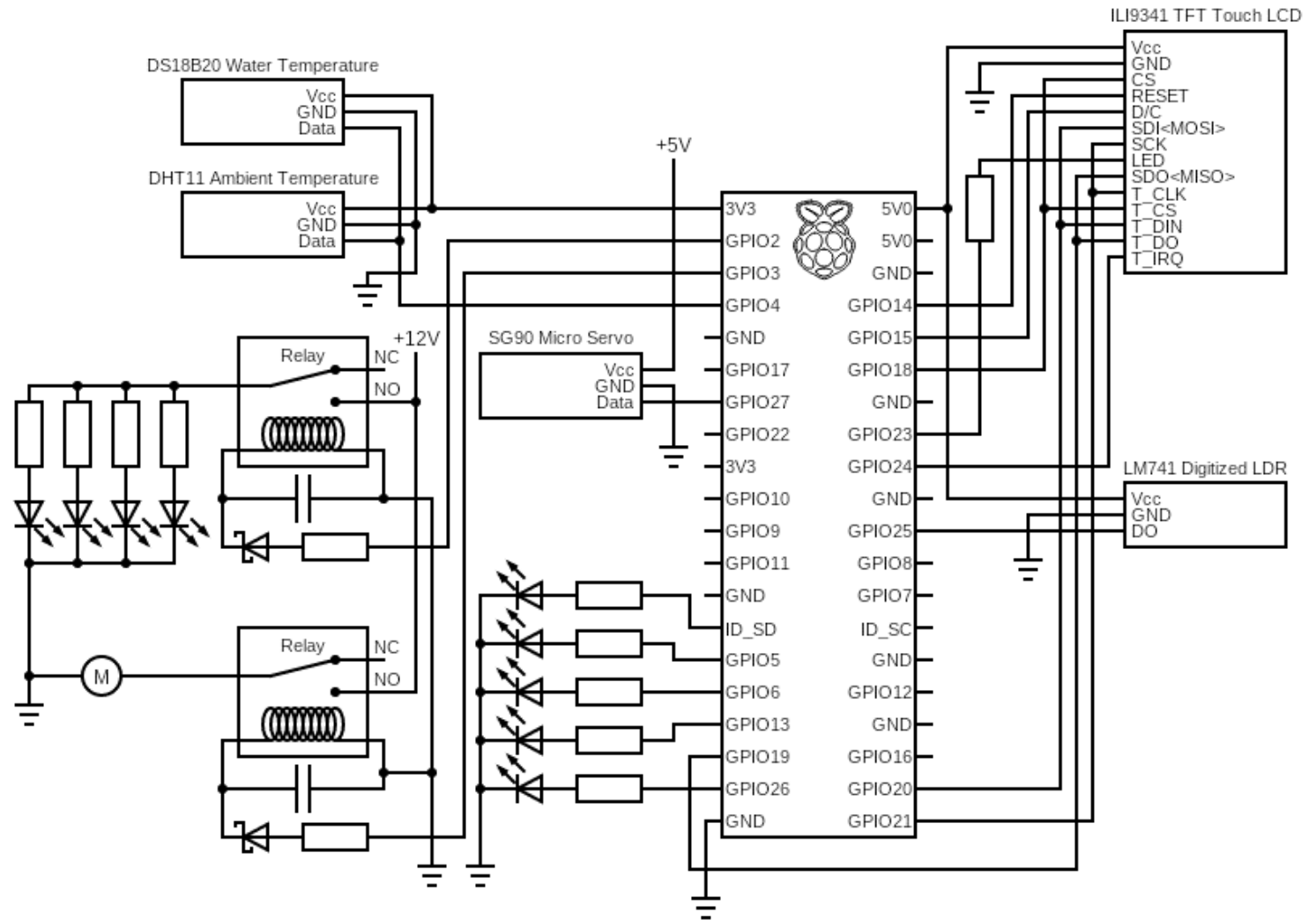
- Manual GUI Switching

Development Plan



GPIO

- Raspberry Pi 3 B+
- ILI9341 TFT Touch LCD
- SG90 Micro Servo
- DS18B20 Water Therm.
- DHT11 Ambient Therm.
- LM741 Digitized LDR
- 2 Relay Modules
- 5 Status LEDs



Week 1 Task Assignment

Danny

- Compile Kernel
- Assemble Build

Ilman

- Setup LCD
- Assemble Build

Naufal

- Setup Access Point and DHCP Server
- Gather Parts

Wahyu

- LED Circuit Assembly
- Gather Parts

Thank You