**Arduino Planning**

*~~Rev. 0 – 4/5/2024 – Created~~*

*~~Rev. 1 – 10/24/2024 – Imported 30 Day Lost in Space Reload~~*

*~~Rev. 2 – 11/08/2024 – Future Path Drafted~~*

*~~Rev. 2 – 11/09/2024 – Renamed Project Planning~~*

**Rev. 3 – 11/10/2024 – Downloaded and Pasted Course Indexes for:**

**Cogsworth City**

**Shields Kit Training**

**Pandora’s Box AI Apocalypse**

**Draft Plan:**

**Arduino**

* *~~Adventure Kit: 30 Day Lost in Space Reload~~*
* *~~Adventure Kit: Cogsworth City – Complete / Backlogged~~*
* **Shields Kit Training – In Process**
* Pandoras Box: AI Apocalypse
  + *~~Pandoras Box: Another Life (Probably Skip -- Intermediate-Level Alternative to AI-Apocalypse)~~*
  + *~~Pandoras Box: Spy vs Spy (Probably Skip -- Beginner-Level Alternative to AI-Apocalypse!)~~*

**Python**

* *~~Intro to MicroPython~~*
* **Learn Python Book – In Process – Reboot and/or Restart**
* Neon Rhelm: Beginner Micro Python
* Nebula Raiders: Advanced Micro Python

**Course: 30 Day Lost in Space Reload**

***~~Start Here!~~***

* *~~Ignore only if you hate learning~~*
* *~~Optional: How to make your own personal "Astrid" Al Assistant for the Course~~*

***~~Bonus Training~~***

* *~~Ready for more projects? (E-Books And Intense Training Video)~~*
* *~~Breadboard Explained~~*
* *~~How NOT to break your HERO Board~~*
* *~~HERO Board Anatomy~~*
* *~~Voltage, Amperes, Wattage~~*

**Community Projects**

* *~~What is this section? + how can I contribute?~~*
* ***~~3d printable control panel by Dltd  Backlog~~***
* ***~~3d printable control panel by Catfishl  Backlog~~***
* ***~~30 Days Lost in Space PDF Guide by Linda  Backlog~~***
* ***~~Printable Quiz Questions by Alex  Backlog~~***
* ***~~2 hour competition version of 30 days lost in space by Alex  Backlog~~***
* ***~~3D Print Greg's Control Panel Yourself!  Backlog~~***

**Daily Broadcasts**

* *~~Day 0: Prologue~~*
* *~~Day 1: Incoming Broadcast from InventrCorp~~*
* *~~Day 2: It's really dark in here...~~*
* *~~Day 3: I'm worried about your battery levels~~*
* *~~Day 4: Cabin Lighting~~*
* *~~Day 5: Creative Day #1~~*
* *~~Day 6: Time to fix the battery~~*
* *~~Day 7: We still need to keep an eye on this~~*
* *~~Day 8: Adding some color to this dark place~~*
* *~~Day 9: A better way to do things~~*
* *~~Day 10: Creative Day #2~~*
* *~~Day 11: Starting your control panel~~*
* *~~Day 12: Can you hear us?~~*
* *~~Day 13: HERO Security 101~~*
* *~~Day 14: Advanced security panel~~*
* *~~Day 15: Creative Day #3~~*
* *~~Day 16: A fancy new display~~*
* *~~Day 17: H jyfwapj tlzzhnl~~*
* *~~Day 18: The surface seems so much closer~~*
* *~~Day 19: New Horizons~~*
* ***~~Day 20: Creative Day #4 → Fail → Backlog~~***
* *~~Day 21: Hello New World~~*
* *~~Day 22: Display Panel Details~~*
* *~~Day 23: Launch System~~*
* *~~Day 24: Back to Orbit~~*
* ***~~Day 25: Creative Day #5  Backlog~~***
* *~~Day 26: HERO\_AUTOPILOT.EXE (Fun W/Bitmaps)~~*
* *~~Day 27: HERO\_AUTOPILOT.EXE Part 2~~*
* *~~Day 28: Landing Gear~~*
* *~~Day 29: Landing Gear Part 2~~*
* *~~Day 30: Home Sweet Home! (Mission Complete!)~~*

**BONUS: "No Code Coding Challenge"**

* *~~No Code Coding Challenge - Introduction~~*
* ***~~No Code Coding Challenge - Part 1  Backlog~~***
* ***~~No Code Coding Challenge - Part 2  Backlog~~***
* ***~~No Code Coding Challenge - Part 3  Backlog~~***
* ***~~No Code Coding Challenge - Part 4  Backlog~~***
* ***~~No Code Coding Challenge - Part 5  Backlog~~***
* ***~~No Code Coding Challenge - Part 6  Backlog~~***

**Course: Cogsworth City**

**Adventure Kit - Cogsworth City**

*~~Day 1: Getting Set Up with HERO Board~~*

*~~Day 2: The Button Chronicles~~*

*~~Day 3: The Illuminated Path~~*

*~~Day 4: Movement in the Shadows~~*

*~~Day 5: The Trial of Lights and Buttons~~*

*~~Day 6: The Guardians of Cogsworth~~*

*~~Day 7: The Lost Beacon~~*

*~~Day 8: The Echoing Call of Safety~~*

*~~Day 9: The Festival Of Lights~~*

*~~Day 10: Restoring the City’s Voice – Morse Code Device~~*

***~~Introduction To Coding Class -- Backlog~~***

***~~Lesson #1: Getting Started – Hold till return from Thanksgiving~~***

***~~Lesson #2: Blink an LED~~***

***~~Lesson #3: Push Button~~***

***~~Lesson #4: Fade an LED~~***

***~~Lesson #5: Scrolling LED~~***

***~~Lesson #6: Photoresistor Night Light~~***

***~~Lesson #7: Traffic Controller~~***

***~~Lesson #8: LED Dice~~***

***~~Lesson #9: Binary Counting~~***

***~~Lesson #10: Whack an LED~~***

***~~Learn HERO Coding - No Extra Components Required :) -- Backlog~~***

Hello World

Will Sally be walking home?

Random Inputs

Tic Tac Toe

The Best Way to View Your HERO’s Data

***~~Individual Component Tutorials -- Backlog~~***

Wires

LED

Breadboard

Resistor

Photoresistor

HERO

9v Battery Connector

The Box

37 Sensor Kir x Cogsworth City DLC

37 Sensor x Cogsworth City DLC 01 – Lesson 1: The Joystick Navigator

DOWNLOAD FULL 37 SENSOR DLC FOR COGSWORTH CITY HERE

Whats Next?

What’s Next? Your 30 Day Challenge

**Course: Shields Kit Training**

*~~READ ME FIRST~~*

* *~~Screen Brightness – LCD Shield (Important!)~~*
* *~~Install the Libraries~~*

**Multi-function Shield Buttons Complete. Beeper, POT, and Timer tested on Hardware**

* ***~~Buttons – Multi Function Shield~~***
* **Beeper – Multi Function Shield**
* **Potentiometer – Multi Function Shield**
* **Countdown Timer – Multi Function Shield**

LCD Keypad Shield

* Getting Started – LCD Shield
* Buttons – LCD Shield
* Custom Characters – LCD Shield
* Scrolling Characters – LCD Shield

**Course: Pandora’s Box AI Apocalypse**

**Getting Started**

Facebook Group (Community & Communications)

Day Zero: Apocalypse

The Day AI Gained Conceisness (Getting Started)

**Chapter 01: Moving In**

Do these antiques still work? (Blink for HERO XL)

Bad Wiring Systems (Fixing the Lights)

Easy Light Toggles (adding some button inputs)

Solar Simulation Shinanigans – (Power Grid Issues!)

404 ERROR: Alarms not found (Buzzers)

Dim the Lights! (Potentiometers & Pusle Width Modulation)

**Chapter 02: Base Security 101**

Motion Sensor Security System

Keypad Door Lock

NFC Badges

RTTTL Alarm

**Chapter 03: GreenHouse**

Forgetting to water the garden again (Dry Plant Warning System)

Heat Management Pt.1 – Fan Ventilation System Simulation

Heat Management Pt.2 – Automatic Fan System FAILURE (Power draw too high! – Relays)

**Chapter 04: Daily Life Essentials**

Accurate Alarm Clock

Clap Lights [](https://learn.inventr.io/courses/adventure-kit-2-day-0/lessons/clap-lights-👏-3/)

There are other survivors….? Getting Started T-Display (and discovering others exist!)

**Chapter 05: The Phoenix Restoration (Resistance Group for Humanity)**

The other survivors share their knowlege – Time to fight back! (Advanced T-Display Networking/Communication)

Automatic 180 Degree Sweep Radar Upgrade

**Chapter 06: Base Security++ (Radar System)**

False Signals – RGB Turret w/LCD TouchScreen

False Signals 2 – RGB Turret w/T-Display

Official Victory Signal Flare (Finale!)

**Chapter 07: Showdown Against The AI**

What’s next?

Mega 2560 R3 (HERO XL)

**Individual Part Tutorials**

Potentiometer

T-Display S3 w/ESP32

1 Digit 7 Segment Display

Breadboard Power Supply

Real Time Clock Module

Ultrasonic Sensor

Mega 2560 Prototype Shield

180 Degree Servo

DC Motor w/Fan

LCD Touchscreen Shield

PIR Motion Sensor

Relay (5V) Module

[Photoresistor](https://learn.inventr.io/courses/adventure-kit-2-day-0/lessons/photoresistor-3/)

Capacitors/Transistors/Diodes

Rain Sensor (Water Level)

Push Button

Resistors Tutorial

Infrared Reciever + Remote

Logic Level Converter

RFID Reader & Badge

Rotary Encoder

4 Digit 7 Segment Display

Gyroscope & Accelerometer Module

Sound Sensor

Light Emitting Diodes

Temperature & Humidity Sensor

Joystick Module

RGB LED

Active & Passive Buzzer

Breadboard

Stepper Motor + Driver

LCD 1602 Screen

4×4 Membrane Keypad