

## SRP Cards

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Format is as follows:

	[Name of Class] Single Responsibility Principle Card		[if it extends/etc.] [classes relevant]
The	[Name of Class]	[Action the class does]	Itself.
The	[Name of Class]	[Action the class does]	Itself.

### Notes:

- Exception classes are not given SRP cards, because they do nothing more than `super()`, or `super(msg)`.
- Two different projects are documented, the main capstone project, and a modified library used.
- DNE stands for "Does Not Extend", means it does not extend, implement, etc.
- Descriptions for the classes (desc: [...]) act as a way of showing the single responsibility of each class
- `PortDropDownMenu` and `PortDropDownMenuFX` do not violate the DRY rule, because one is tailored for Swing and the other JavaFX
- Uses the `JSerialComm` library, with an additional layer on top.

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CapstoneV0_095	desc: The main capstone project
app_Controller	
CapstoneMain.java	desc: The main class, launches javaFX application
Kaizen_85.java	desc: Custom logger, prints string array to file
backend_Models	
ExamplePattern.java	desc: Example class for creating new patterns
GeneralSettingsException.java	desc: Thrown when settings are not set properly
Pattern.java	desc: Basic framework to create patterns
Pixel.java	desc: Stores color values, and LED index
PixelValueException.java	desc: Pixel throws if set value over 255, below 0
SerialComms.java	desc: Sends strings over serial to the arduino
frontend_ViewController	
InitPopup.java	desc: A popup to get setting before main window
MainViewDisplayFX.java	desc: The Main window GUI
ViewController.java	desc: Connection between MainView and Patterns
Settings.java	desc: Send settings down to backend from init GUI
ArdunioComms2	
arduinocomms2	
AlertBox.java	desc: Makes a Swing popup, with a message given
Arduino.java	desc: Simplifies serial communication
PortDropDownMenu.java	desc: Dropdown menu for serial ports, Swing type
PortDropDownMenuFX.java	desc: Dropdown menu for serial ports, javaFX type
SerialPortConverter.java	desc: helper for PortDropDownMenuFX

## CapstoneV0\_95

### Controller:

	CapstoneMain Single Responsibility Principle Card		DNE
The	CapstoneMain	start[s]	Itself.

	Kaizen_85 Single Responsibility Principle Card		DNE
The	Kaizen_85	Sets the log path [for]	Itself.
The	Kaizen_85	Writes to a String array [within]	Itself.
The	Kaizen_85	Writes the String array to the log location	Itself.

### Model:

	ExamplePattern Single Responsibility Principle Card		Extends Pattern
The	ExamplePattern	Start[s] the pattern	Itself.

	Pattern Single Responsibility Principle Card		DNE
The	ExamplePattern	Set[s] the Color	Itself.
The	ExamplePattern	Set[s] the delay	Itself.
The	Pattern	start[s]	Itself.

	Pixel Single Responsibility Principle Card		DNE
The	Pixel	Sets RGB, index values given	Itself.
The	Pixel	Gets RGB and index values	Itself.

	SerialComms Single Responsibility Principle Card		DNE
The	SerialComms	Returns a char from the serial port	Itself.
The	SerialComms	Sends String through specified serial port	Itself.

### View:

	InitPopup Single Responsibility Principle Card		Extends MainViewDisplayFX
The	InitPopup	Gets User log folder info	Itself.
The	InitPopup	Creates a GUI for the user	Itself.
The	InitPopup	Gets User LED strip/matrix info	Itself.

	MainViewDisplayFX Single Responsibility Principle Card		Extends Application
The	MainViewDisplayFX	Creates a GUI for the user	Itself.

	ViewController Single Responsibility Principle Card		DNE
The	ViewController	Responds to GUI buttons	Itself.
The	ViewController	Controls which Pattern to run	Itself.

## ArdunioComms2

	AlertBox Single Responsibility Principle Card		DNE
The	AlertBox	Show[s]	Itself.

	Arduino Single Responsibility Principle Card		DNE
The	Arduino	Returns bytes from the serial port	Itself.
The	Arduino	Sends bytes to the serial port	Itself.

	PortDropDownMenu Single Responsibility Principle Card		Extends JComboBox<String>
The	PortDropDownMenu	Refreshes choices for serial ports	Itself.

	PortDropDownMenuFX Single Responsibility Principle Card		Extends ComboBox<SerialPort>
The	PortDropDownMenuFX	Refreshes choices for serial ports	Itself.

	SerialPortConverter Single Responsibility Principle Card		Extends StringConverter<SerialPort>
The	SerialPortConverter	Returns the SerialPort from a name	Itself.
The	SerialPortConverter	Returns the name of a SerialPort	Itself.