

Instructor Kickoff

Welcome to Flatiron School!

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Agenda

- Warm-up & Introductions
- Your Support Team
- Program Tools
- Program Structure & Schedule
- Setting Yourself Up For Success

Warm-up

- Introduce yourself:
 - Name
 - Pronouns
 - Where you are located
- Share a book, podcast, movie, or TV show you've enjoyed recently.

Your Support Team

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I'm your instructor



What I do:

- Conduct sessions on core curriculum
- Administer and grade assessments
- Deliver feedback on coursework and progress

**Daniel
Burdeno**

He/Him



Your Support Teams



Technical Support:

- **Instructors:** Deliver lectures, conduct assessments, and provide feedback on coursework and progress

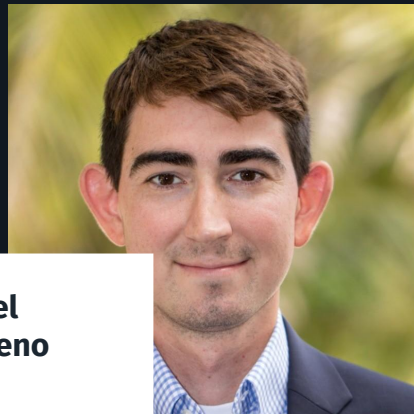
Non-Technical Support:

- **Student Advisors:** One-on-one support during your program
- **Career Coaches:** One-on-one support after graduation
- **Community Team:** Slack channels, newsletters, and events to help you connect with others and build your network

The Squad



**Angelica (Jelly)
Spratley**



**Daniel
Burdeno**



**Praveen
Gowtham**



Instructors

- Able to support during specified hours
 - Instructors = Work day
- Exceptions include meetings, supporting events, lunch, and prep time.
- Instructional team will give you constructive feedback on code and professional skills.
 - They will not necessarily hand you the answer
 - but they'll guide you.



Program Tools

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Discord

Important channels to know:

#ds-ntl-091624

#all-about-data

#announcements

#events

Reminders:

Update your server profile:

- Photo (optional!)
- First name and last name (please please please)
- Get roles!

Complete your onboarding (visit [Server Guide](#))

Download the desktop app!



Our Code of Conduct applies to Discord. This is a part of our community but we can't be everywhere at once. Please let us know if you're ever uncomfortable with something that was said or the way something was said.

Flatiron School uses Canvas, a learning management system, to deliver our program and technical content.

General information, resources, and your calendar

Lessons, labs, assessments

FYI: Here's your calendar!

Ada

Meet our chat bot, powered by OpenAI

- Tailored prompts
- Asks questions and uses analogies, diagrams, code samples
- Guides you toward solution

How? Chat box in Canvas

Array Basics

Learning Goals

- Access and manipulate data in arrays in Ruby

Introduction

Arrays in Ruby share many of the characteristics you're already familiar with from working with arrays in JavaScript. They store lists of data (which can be any data type, and even multiple types of data within the same array) and provide methods for working with arrays in Ruby.

Array CRUD

In Ruby, as in JavaScript, you'll commonly need to Create, Read, Update, and Delete data from arrays. For a full list of array methods in Ruby, see the [documentation](#).

Open up IRB and follow along with these examples. Let's start by creating an array representing a shopping list.

```
shopping_list = ["Cookies", "Ice Cream", "Snickers"]
```

Reading Elements From Arrays

As in JavaScript, you can access elements of the array using bracket notation with the index of the element you want to access.

```
shopping_list[0]  
# => "Cookies"  
shopping_list[1]  
# => "Ice Cream"
```

You can also access elements starting from the end of an array by providing a negative index:



Chat



Please show me how to loop through an array in python

Certainly! In Python, you can loop through an array using a for loop. Here's an example:

```
my_array = [1, 2, 3, 4, 5]
```

```
for item in my_array:  
    print(item)
```

In this example, we first define an array called `my_array` that contains the integers 1 through 5. We then use a for loop to iterate through each item in the array and print it to the console.

You can also use a while loop to iterate through an array by using an index variable to keep track of the current position in the array:

```
my_array = [1, 2, 3, 4, 5]  
index = 0
```

```
while index < len(my_array):  
    print(my_array[index])  
    index += 1
```

In this example, we initialize an index variable to 0 and use a while loop to iterate through the array until we reach the end.

Ask a question...



Program Structure & Schedule

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Program Timeline

Phase 1

Weeks 1-3

Data

Engineering

Phase 2

Weeks 4-6

Statistics

Phase 3

Weeks 7-9

Machine

Learning

Phase 4

Weeks 10-12

Advanced

Topics

Phase 5

Weeks 13-15

Capstone 🎉

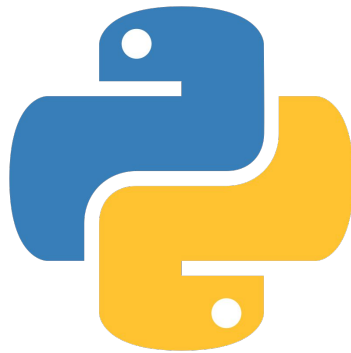
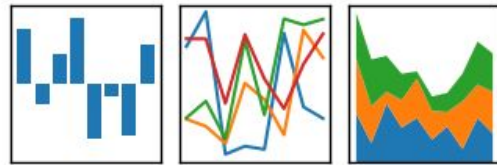
Curriculum Overview

Phase 1

- Coding in Python
- Data Manipulation and Analysis
- Data Gathering

pandas

$$y_{it} = \beta' x_{it} + \mu_i + \epsilon_{it}$$



Curriculum Overview

Phase 2

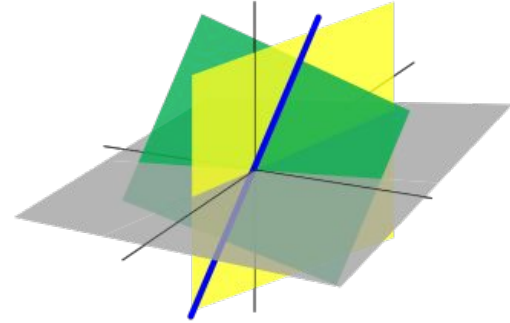
- Coding in SQL
- Statistical Modeling
- Simple Linear Regression



Curriculum Overview

Phase 3

- The Math behind Machine Learning
- Classification Algorithms
- Building Modeling Pipelines



Curriculum Overview

Phase 4

- Recommendation Systems
- Natural Language Processing
- Neural Networks



Curriculum Overview

Phase 5

- Capstone!



The Next 15 Weeks

Lessons and Labs

Learn the fundamentals. **You do NOT need to complete all labs and lessons** - but going through most is essential to passing the code challenges and creating projects.

Quizzes [10% of Grade]

Each phase you will take a few quizzes to check your understanding and ensure your learning is on track! You have two attempts at each quiz.

Code Challenges & Checkpoints [40%]

During each phase, you'll have 2 checkpoints and a code challenge to assess your understanding of the phase. Think of these as your 'tests'.

Projects [50% of Grade]

In week 3 of phase 1-4, you will build a project to practice all of the concepts from the phase and build your portfolio for the job search. Phase 5 consists of 3 weeks to build a cumulative capstone project.

Grading

Checkpoints and the Code Challenge

Checkpoints and the Code Challenge are worth **40%** of the overall grade in a phase.

Quizzes

Quizzes are worth **10%** of the overall grade in a phase.

Projects

Projects are worth about **50%** of the overall grade in a phase.

Passing Each Phase

In order to pass each phase you must **maintain an overall grade of 70% or higher**. You will receive a Satisfactory Academic Progress Form (like a report card) at the midpoint (after phase 3) and the endpoint of your program with your cumulative grade and attendance percentage.

If you do not achieve the required grades you are afforded **one opportunity to retake** a phase / program.

Letter Grade

Range

4.0	100% to 96%
3.7	< 96% to 92%
3.5	< 92% to 89%
3.3	< 89% to 86%
3.0	< 86% to 83%
2.7	< 83% to 80%
2.5	< 80% to 77%
2.3	< 77% to 74%
2.0	< 74% to 70%
1.7	< 70% to 65%
1.5	< 65% to 60%
1.3	< 60% to 55%
1.0	< 55% to 0%

Plagiarism & Cheating

Lessons and Labs

Remember that you're here to learn and while you can use any resource you desire, copy/pasting code doesn't help you prepare for assessments, interviews, or jobs.

Plagiarism

Don't plagiarize! Using another entity's work without attribution is plagiarism! It is okay to 'reuse' code but it needs to be cited and understood appropriately.

Code Challenges

Not allowed:

- Messenger apps open
- ChatGPT and other AIs

Projects

Should reflect your own original thought and work. Again, it is okay to 'reuse' code but you must be able to explain what the code is actually doing.

Get your blog on!

- Approximately 5 minute read
- Published online
- Technical or tech related subjects
- Encouraged but not required



DEV



Medium

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Setting Yourself Up for Success!

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This isn't like high school or college!



Teaching Methods

- 1:1 instructional sessions
- Office hours
- Lectures (live and recorded)
- Curriculum (lessons and labs)

Student Responsibilities

- Attending and watching Lectures
- Canvas course completion
- Code Challenges
- Projects

Professional Development

- Online branding (LinkedIn)
- Resume and portfolio building
- Networking

Personal Empowerment Protocol:

1. Read the error

2. Google the problem

3. Ask a peer

4. Ask an instructor

- This is an important framework in general for debugging / working through problems.
- Remote learning makes it even more vital!
- Reading errors, looking up problems, and collaborating with peers are essential skills.
- Get practice with them before asking us!

Imposter Syndrome



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Any questions?



For the rest of today...

Now: First Lecture!

- Data Science
- Toolkit

1:00pm ET: Lunch Break

3:00pm ET: Lecture - Introduction to Terminal

5:00pm ET: Program Orientation

6:00pm ET: Stand Down

Get stuck? Post in our cohort Discord channel!

