March - Day One (03/08)

Agenda

- The Outcome
- Myths
- About Us
- The Curriculum
- The Design
- What to Expect
- Welcome to the Family

The Outcome

You will be a new type of bootcamp graduate to the industry: a more capable junior programmer, a wiser team collaborator, and an agent of higher productivity.

The tools you will know are cutting-edge.

You will find opportunities at companies of all types and sizes, in many places around the world.

You will have a heightened appeal to new economy software companies.

You will equally contend with four-year school applicants for positions at enterprise companies.

You will be a strong software engineer.

You will have the ability to succeed at a big company or small, domestically and around the world.

You will have the confidence of knowing that you have learned how to learn, and have the ability to keep learning to ensure a long and interesting career.

Myths Debunked

A few common myths about programmers...

- You have to be amazing at math.
- You need to be a genius.
- There is a best programming language to learn.
- You need to know everything about computers.
- You have to memorize everything you use.
- All programming is an isolated experience.

A few indicators you can be a successful programmer:

- You are ready to work really hard.
- You are patient and understanding with yourself and others.
- You are willing to challenge yourself and allow others, like your teachers, to challenge you.
- You like to build things.
- You like to express yourself.
- You like to solve problems.
- You can manage and endure frustration.

About Us

Our Passion

We are in the business of helping people change their lives. We can't imagine a better business to be in.

We love the feeling of helping you succeed.

That doesn't mean that this will be all fun and games. It will be tough. We will be tough. We do our best to strike the balance.

We are here to support students who want to be software engineers.

Our Evolution

2013

(We were engineers and made it up as we went)

+

Learning Taxonomies
Cognitive Psychology
Knowledge Trees
Durable Memory
Lots of Experiments

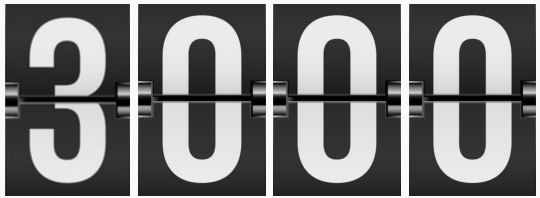
=

2021

(We're still engineers, but now also world class educators)

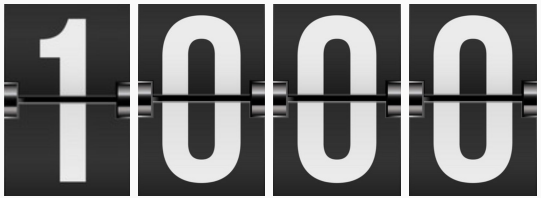
The Feedback Loop

We keep learning every day from our graduates and the employers who hire them. Our curriculum and instructional design is kept current with their help.



Graduates
(and counting)

placed at



Employers
(and counting)

The Curriculum

The most current curriculum on the planet.

You're going to learn "full-stack Web development."

That means:

- Becoming proficient in languages that drive the modern Internet: SQL, JavaScript, Python, HTML, and CSS.
- Using state-of-the-art tools and web frameworks like React, Express, Flask, and SQLAlchemy.

But wait, there's more...

That means:

- Building Web-scale applications from scratch.
- Working as a highly-dynamic Agile-based team to build complex applications that you can add to your portfolio
- Becoming a software developer that companies want to hire.

Why Fullstack?

Companies now demand “fullstack” developers that know the technology tools for everything from pulling data from where it lives, transforming and enriching it through software, and finally showing it on the screen so real people can make decisions and take actions.

That means that modern software developers need to know languages for databases, application servers, browsers, and more.

Why Computer Science?

Computer science refers to deep understanding of mathematically proven solutions to fundamental problems. An introduction into algorithms, data structures, and the components of networking and computing empowers our graduates to efficiently identify and solve problems.

Learning doesn't stop at week 24! During your job search, you will dive more deeply into these topics as they are an important part of the interview process. The computer science fundamentals you learn here will make you a better programmer and a stronger candidate for your first job.

Why JavaScript?

JavaScript is *the* de facto language for modern Web programming now and for the foreseeable future.

JavaScript is used in a wide range of fields

- Creating user interfaces for web applications
- Programming servers for web applications
- Creating mobile applications
- Even developing Internet-of-Things (IoT) applications

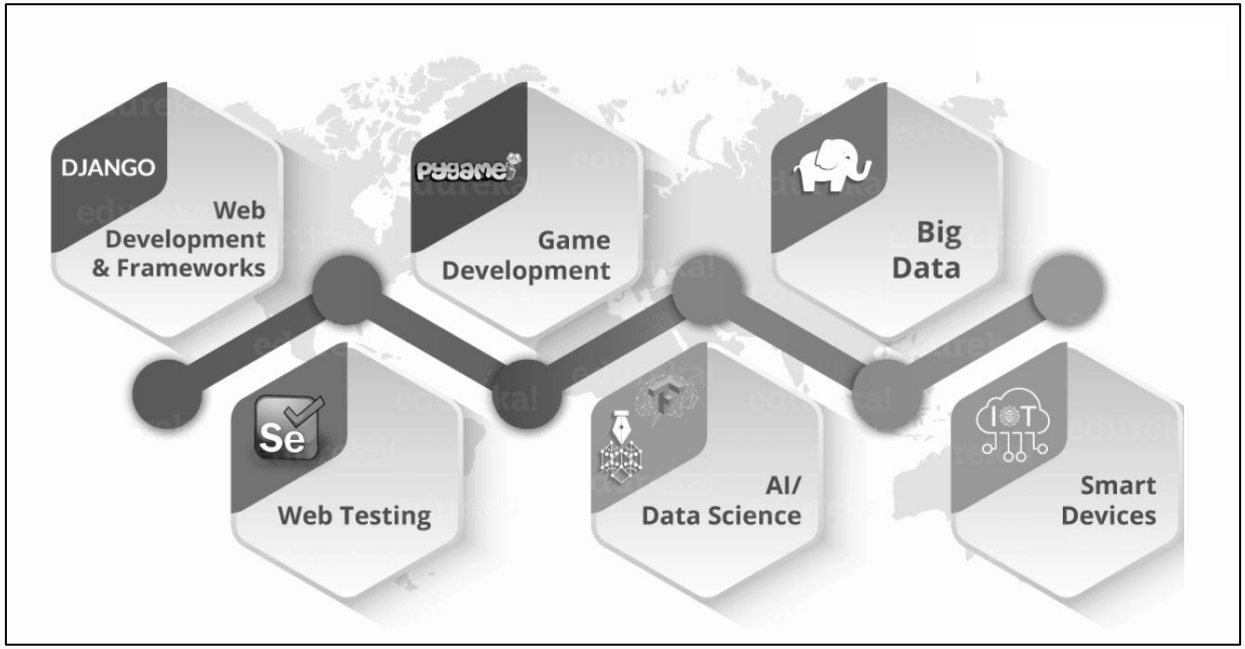
Why Python?

Learning a second language is an essential skill for any engineer and makes learning additional languages effortless as the similarities and differences between languages become apparent.

Python has been beloved in scientific and academic communities for decades. Python has always been the tool of choice on the vanguard of computing including statistical modeling, machine learning, and advanced web architecture.

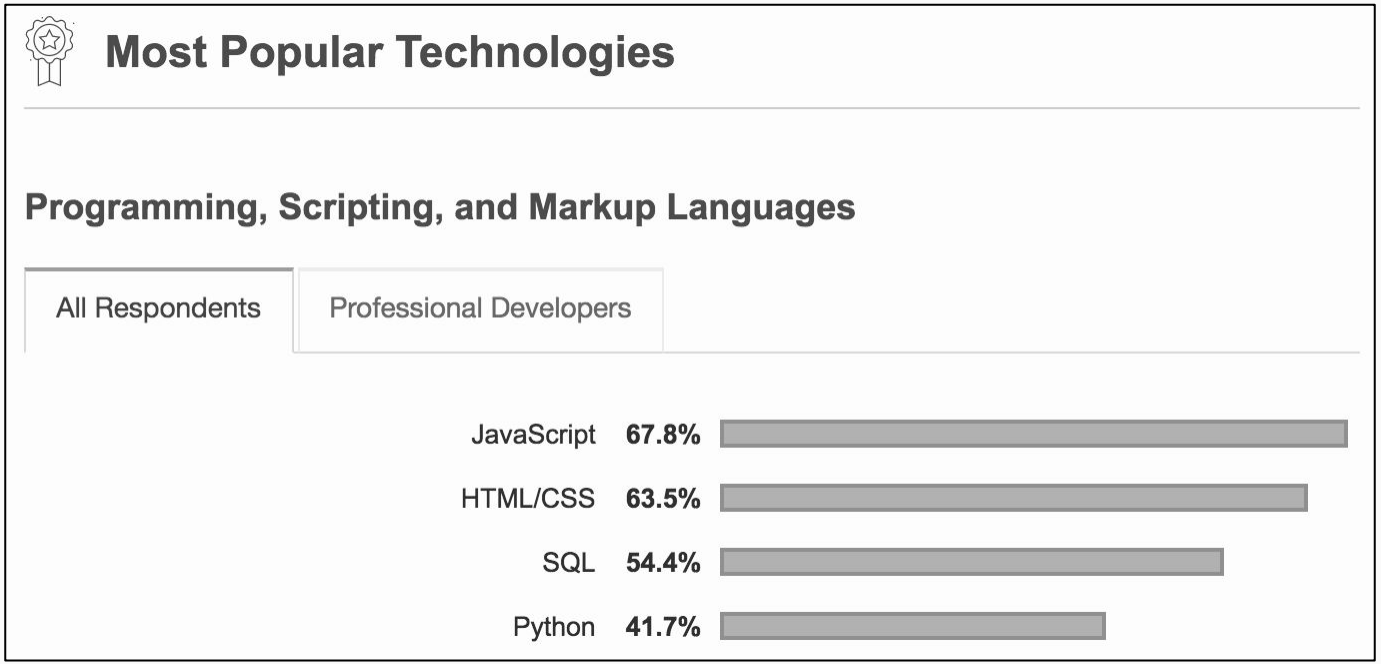
Why Python?

Python has application in diverse domains.



JavaScript + Python

Per Stack Overflow:



https://insights.stackoverflow.com/survey/2019#technology

The Modules, Weeks, and Topics

Module 1	Module 2	Module 3	Module 4	Module 5	Module 6	Module 7	Job Search
Weeks 1-3	Weeks 4-6	Weeks 7-9	Weeks 10-13	Weeks 14-16	Weeks 17-20	Weeks 21-24	Weeks 25 +
Intro to programming JavaScript	OOP, Browser, Asynchronicity	Algorithms, Networking, CCSS	Relational DBS, Express, Project!	React, Redux, Project!	React, Python, Project!	Portfolio & Job Search Strategies	Network, Study, Build, Apply, Get Hired!

The Curriculum

The instructional staff is constantly critical of and constantly iterating on our curriculum material.

- We have a dedicated curriculum team to design and implement changes.
- App Academy curriculum has evolved through thousands of iterations over a long period of time.
- Good education is about good curation. Everything you learn is there for a reason.
- The reason? To succeed in making you:
    - A capable programmer who can solve many types of problems
    - Able to talk knowledgeably to other programmers
    - Understand the history of your new expertise

The Design

Instructional Design

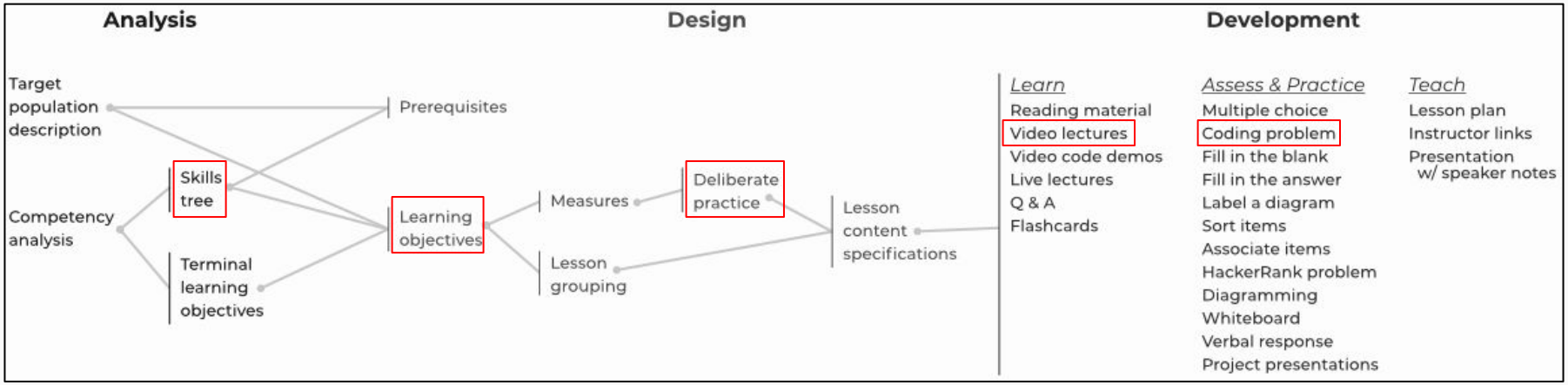
In·struc·tion·al de·sign

inˈstrəkSHənl dəˈzīn

1. the creation of learning experiences and materials resulting in the acquisition and application of knowledge and skills

Instructional Design

From the Skills Tree to the Coding Problem, our foundation of tiered learning objectives, coupled with tactics from cognitive psychology, builds durable memory.



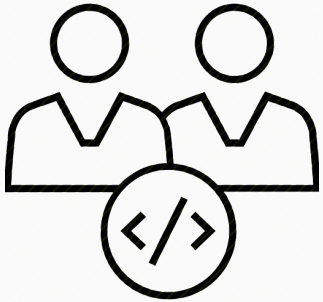
Lectures and Q&A

Every morning, you and your classmates will take part in a lecture session of a mix of live and video lectures. The morning lectures will be provided by the Module Instructor.

You can speed-up or slow-down the lecture videos and write down any questions when you have them.

Lectures are followed by live Q&A sessions with your instructor to answer any questions before you put those concepts into action.

Projects and Pair Programming

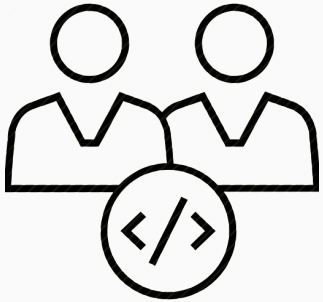


In the afternoon, you will pair-up with a classmate and work on collaborative projects that drive home the concepts from the morning's lecture. These are small, focused projects to reinforce skills.

Working with others is something you'll do almost all the time in software development, so learning to adapt to different people on different projects is very important.

This type of collaboration makes us better problem solvers, better learners, and, ultimately, better candidates for roles in software engineering.

Programming Session Questions

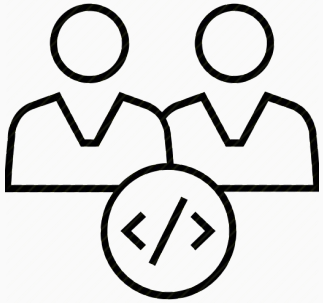


When you are stuck, it is imperative that you ask for help. The instructional team cannot assist you if they are not aware it is needed.

Upon entering a room, instructors want to see that you've been actively trying to find an answer. This includes:

- Googling
- App Academy Open
- Asking a fellow student

Programming Session Questions



Actively looking for answers improves your ability to ask good formulated questions. Once you've spent more than 15 minutes on the problem and you've exhausted the possibilities listed previously, go ahead and ask a question so we can guide you to a solution.

If you are unsure of how to ask good formulated questions take a look at the student handbook

https://open.appacademy.io/learn/student-handbook/code-of-conduct/asking-questions

End of Day Lectures

You spent the day working through different projects to master key concepts. The EOD Lecture will be planned by your Lead Instructors in direct correlation to the learning objectives.

You will also have opportunities to:

- Participate in an interactive discussion
- Discover different approaches to problems
- Gain a wider perspective on the material by synthesizing experiences with your classmates.

Portfolio Projects

These large-scale, authentic projects give you the opportunity to apply your new skills in ways similar in scale and scope to what you'll find in your first job as a programmer.

This course contains four portfolio projects:

- Week 13: Express Project
- Week 16: React Project
- Week 20: Python Project
- Week 21: Full-Stack Project

Assessments

This course includes informal and formal assessments. Formal assessments are also called Summative Assessments and directly test learning objectives.

Summative Assessments occur every Monday morning and cover the previous week's material.

- Variety of testing types: coding, multiple choice, short answer, etc.
- Easy-to-understand scoring

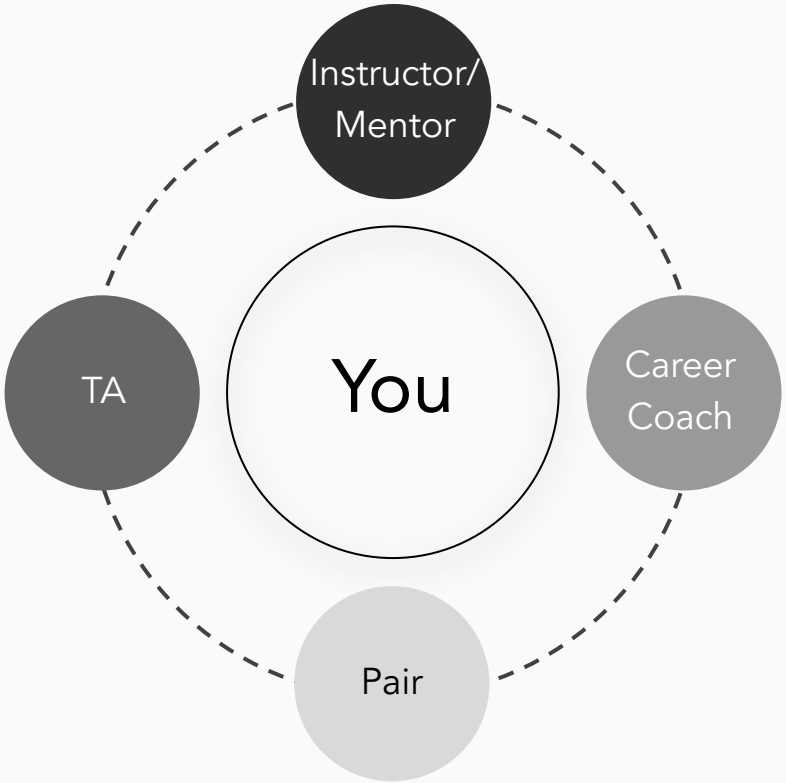
Mastery Learning

Our Mastery Learning approach advances the potential for learning and mastery of content by providing you with sufficient time, attention, and help.

Instead of being dismissed from the program after failing an assessment, you can repeat the topics.

You are allowed three fails and three opportunities to repeat. We call this a deferral, because upon failing an assessment, you will be deferred, which means you will join the cohort one month behind your current cohort.

Your Support Team



We surround you with a passionate team focused on your success, supporting you every step of the way.

Your pair (classmate) rounds-out the team.

Your Support Team

- Lead Instructors
  - Experienced software instructors
  - Will meet with you and help mentor you
- Module Instructor
  - An Experienced Software Instructor
  - Will change every 3-4 weeks
- Instructional Assistant (IA)
  - A top graduate of our program
  - Daily support from someone who has recently walked in your shoes
- Career Coach
  - Experienced advisor
  - Will meet with you throughout your job search

Your Support Team

You'll notice that we'll rotate through 7 modules, and the instructional teammates will change for each module.

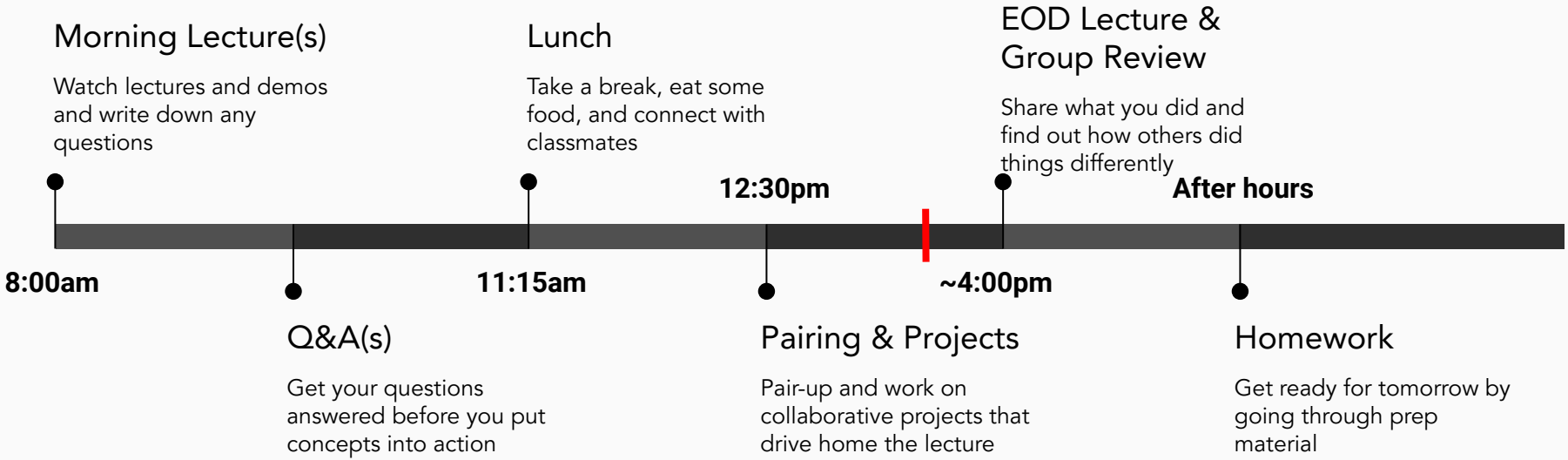
Here is your cohort instruction team:

Ed Herman:

Carlos Garcia:

What to Expect

Daily Schedule



All times PST

Daily Logistics

- When you need to mark your attendance in Progress Tracker:
  - 8:00 am PST
  - 12:30 pm PST
  - 3:00 pm PST
- Breaks:
  - 11:15 am - 12:30 pm PST
  - 2:45 pm - 3:00 pm PST

App Academy Open

Understanding the different materials in AAO

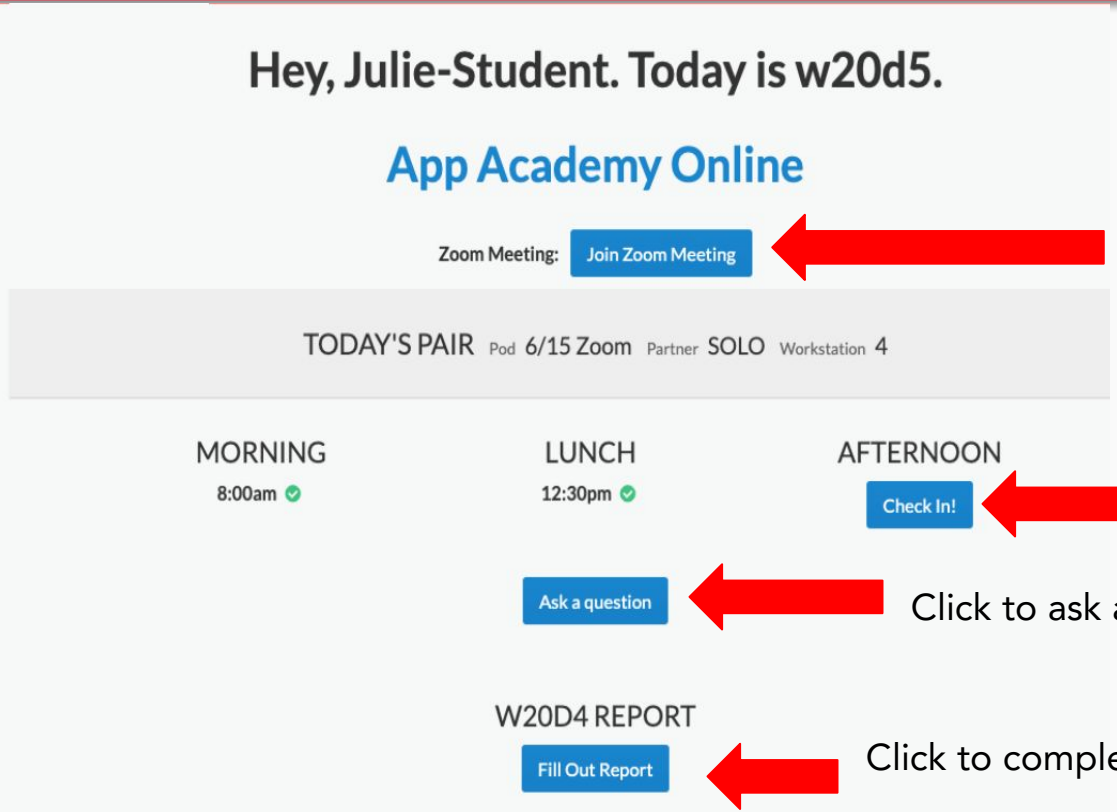
- Weeks
- Days
- Within Days:
  - Learning Objectives
  - Homeworks
  - Lecture
  - Practices

Progress Tracker (PT)

Using PT

- Attendance Tracker
- Asking questions
- Filling out nightly reports - only available from 6:00 pm - 8:00 am PST
- Checking your stats

Progress Tracker (PT)



Click to enter zoom classroom

Click to check in - You are responsible for your own attendance, three times a day. If late, you will receive a strike.

Click to ask a question

Click to complete your report. Every day.

Communications

Extremely important

- Slack
- Zoom
- Intense bootcamp life, but things come up (it's life)
- Be communicative and we will be good

Portfolio Project Expectations

Portfolio Projects are not only an excellent and intentional tool to reinforce your learning, they are the single most important piece of your job search readiness.

You transition from 80+ hours a week of studying to 80+ hours a week building.

Your projects show future employers you have the skills they need.

Your job search can only start when your portfolio projects are completed to a certain degree and deemed ready!

Portfolio Project Expectations

- All four projects will require a minimum level of completion by graduation
- If you fail to complete your Full-Stack Project, you will join the cohort one month behind your current cohort.
- If you do not complete your Full-Stack Project in 2 attempts, you will be administratively dropped from the course.
- Completion will be determined by your Instructors and your Career Coaches.
- Your projects will be hard, but, when we get there, you will be ready.

Student Expectations

Introduction to DEI, Policy & Strategies: Maggie Shaughnessy

Senior Manager of Online Instruction

Introduction to Culture and DEI

DEI stands for: Diversity, equity and inclusion and is a term used to describe programs and policies that encourage representation and participation of diverse groups of people, including people of different genders, races and ethnicities, abilities and disabilities, religions, cultures, ages, and sexual orientations and people with diverse backgrounds, experiences, and skills and expertise.

Code of Conduct

A code of conduct defines how App Academy learners should act on a day-to-day basis. It reflects our daily operations, core values and overall company culture.

App Academy holds a commitment to diversity and inclusion with all of its students. Our ethical principles include expected classroom behavior and respect for all people, which directly align with our values –- to include all students into an honest, unbiased and unprejudiced learning environment.

We will make sure you have access to the COC and require you to read it through.

Code of Conduct Highlights:

- Be professional
- Be inclusive
- Be considerate and respectful
- Use your words with purpose and choose them carefully
- Keep your conversations workplace appropriate

You must follow the above in all discussion channels, inside and outside of a/A, including Discord.

Violations of the Code of Conduct:
Depending on severity, App Academy will assign strikes or dismiss violating students.
You may report violations to your learning team or anonymously on Progress Tracker.

No Politics, No Judgements

- You are here to learn to code - not to discuss politics or judge others
- We focus on inclusive learning
- We live in all parts of the US (and sometimes in other countries)
- Publicizing your political affiliation or like/dislike of any certain group of persons is not allowed

Proper Discussion Channels:

- Diversity & Inclusion (D&I) Roundtables
- Student Resource Groups (SRGs)

Student Resource Groups

- Women, Trans, and Gender Non-Conforming (WTGNC)
- Lesbian Gay Bi Trans Queer + (LGBTQ+)
- Students with disabilities (PwD)
- Black, Indiginous, and Latinx (BIL)
- Asian
- Parents
- Veterans and Active Military
- The diversity channel! - Open to all

Introduction to Policy & Strategies

Assessments and Learning Objectives

- 15 total assessments administered on Monday mornings.
  - Specifics for each assessment will be discussed prior to you taking it
    - Allotted Time
    - Resources
- Directly test learning objectives and cover the previous week's material.

Assessments and Deferrals

- You are allowed three fails and three opportunities to repeat.
  - Upon failing an assessment, you will join the cohort one month behind your current cohort.
  - This means you will repeat 3-4 weeks worth of content so that you can gain a level of mastery in that specific subject
  - Each deferral will add 1 month to your total time at a/A
    - The total instructional time can be up to 9 months
- After your third fail, you will be administratively dropped from the course.

Strikes

- A strike is an indicator of work missed and we use them to record time away from the learning environment.
- Provides structure and accountability
  - You hold the responsibility to inform your instructional team if you will not be in attendance
    - Natural Disasters
    - Family Tragedy
    - Medical / Illness
    - Internet Outages

Strikes

- The strike limit for this course is 10. No exceptions.
- Top reasons for getting strikes:
  - Missing check-in
  - Not having your camera on
  - Not filling out nightly report
  - Having phone out during lecture/pairing time
  - Being disruptive or rude

Avoiding Strikes

- Form A Routine
  - Set Check-In Alarms (8am, 12:30pm, 3pm) & Report Alarm (EOD)
    - Let's set them now!
    - Make it annoying!
  - Take your breaks
    - Your brain needs a break. Don't try to skip them!
  - Complete Reports
    - Always complete your reports at the same time every day
- Camera on & at computer
- Respect others. Be kind.

Part II: The Job Search

Introduction to Career Quest & Job Search:
Mark Rodriguez

The Placements Team

Anna Paschall, Senior Manager - Placements

Mark Rodriguez, Manager Online - Placements + Technical Coach

Michael Norton, Technical Coach

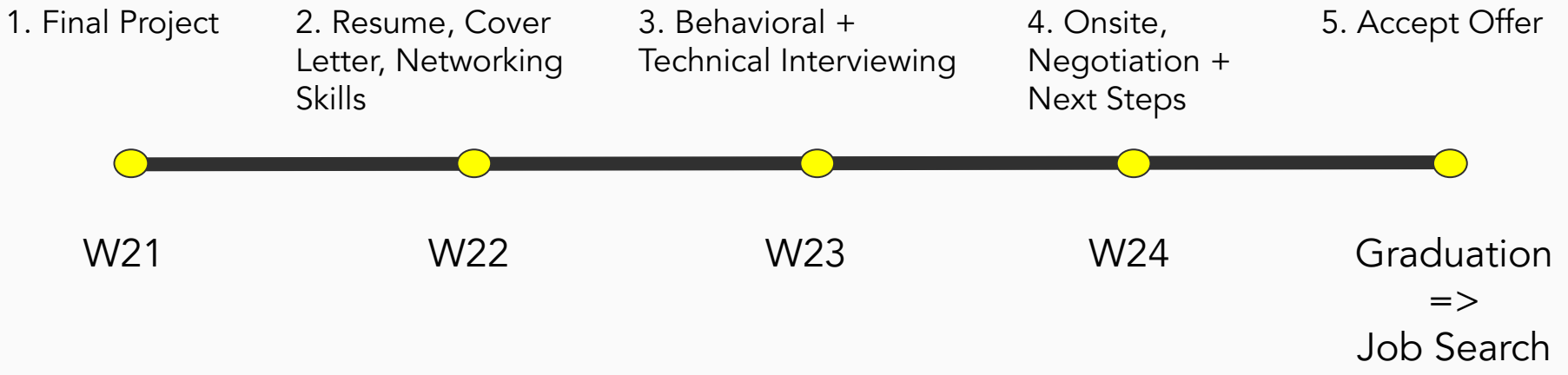
Michelle Carothers, Behavioral Coach

Allie Villarreal, Behavioral Coach

Tyna William, Technical Coach

Tadeo Garcia, Alexander George, Chris Talley - Software Engineering Assistants

Career Quest



Career Quest (Module 7) is designed to mirror the typical application pipeline and allow time to complete and perfect your SWE portfolio.

There's lots more to do!

- The first 24 weeks at a/A are about giving you the tools necessary to succeed on the job. The Job Search gives you the tools you need to succeed in the interview.

- You will build projects, study theory, practice DS&A, network, attend (virtual) conferences & meetups, and present yourself as an engineer.

- You will be assigned a Career Coach and have access to a team of experts to support and guide you toward your end goal - getting hired!

Job Search Expectations

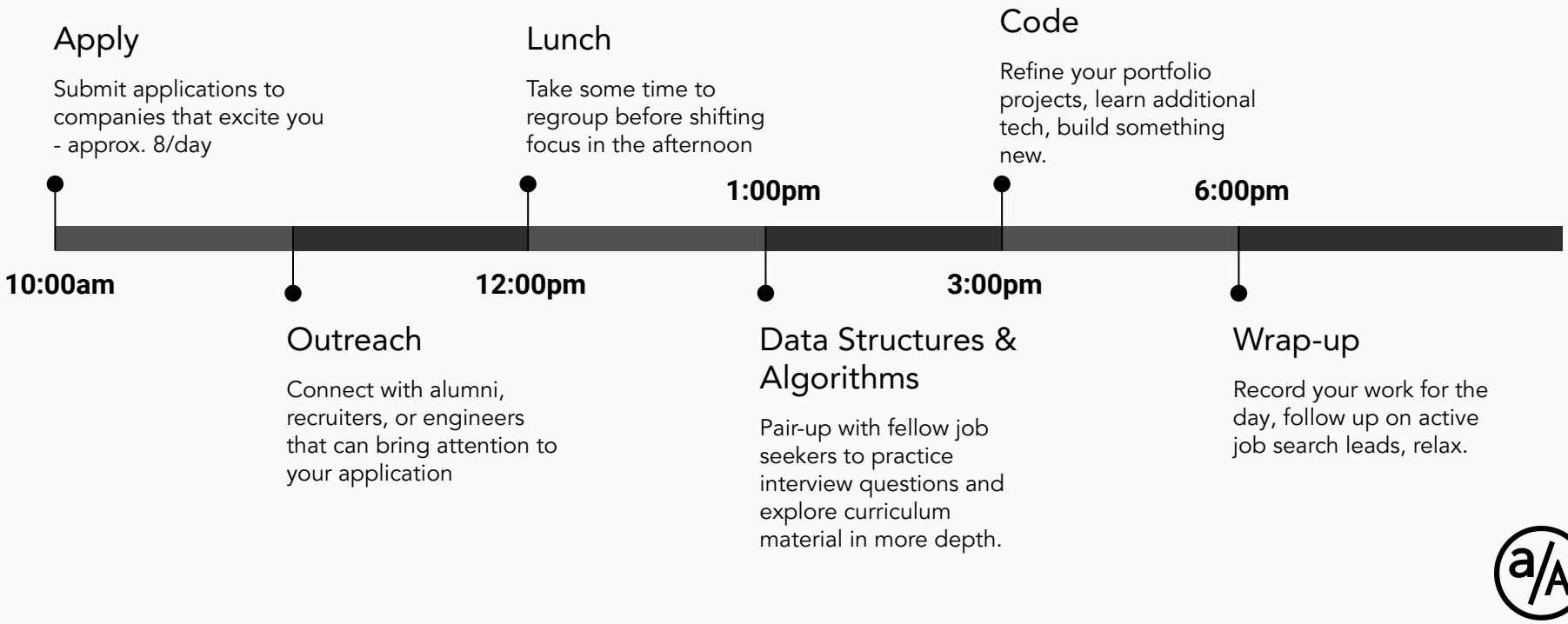
- 40+ Hours of work each week - the Job Search is a **full time job** and lasts an average of 6-8 months* post graduation - entirely dependant on the work you put in.

- We treat each Job Seeker as a member of an engineering team. You will have more control over your day-to-day schedule and be expected to research and debug largely on your own.

- Attend mandatory weekly stand-ups and additional meetings and events as required by your coach.

- Communicate with your Coach early and often to maintain momentum while managing the ups and downs of the Job Search process

Average Daily Schedule



The Takeaway:

The Bootcamp Experience here at a/A ends the day you sign your offer letter!

Introduction to Behavioral Health: David Young

Manager, Mental Health Design and Training

Manager for Mental Health Design and Training

Design: systems, programs, services

Deliver: trainings, consultation, assessments

Develop: internal resources, collaborations with external service providers

Promote: wellness, resiliency, social-emotional skills/EQ

Manager for Mental Health Design and Training

MHDT Vision

AppAcademy students will learn and apply the psychological and self-management skills required to successfully navigate the mental and emotional challenges of an intensive bootcamp program. Any student experiencing a behavioral health concern will receive the support, resources, and services they need.

Mission of MHDT

To design systems and develop programs that address the BH needs and psychological well-being of a/A students to ensure their success. MHDT provides assessments, consultation, trainings and BH resource development to enhance students and support a/A staff.

Goal

Create a culture where its OK to ask for help for BH issues

Behavioral Health = Mental Health and/or Substance Use

Welcome to the a/A Family

Bootcamp Life

- Can be frustrating and overwhelming.
- Can make you uncomfortable.
- Get comfortable with being uncomfortable.
- We're all in this together!
- Lean on each other, ask each other!
- Give each other the chance to flex explanation muscles.
- We are here to support you on your journey to become a software developer.
- We can do it!!!!

Welcome

You now join a cohort of classmates who are as motivated as you are to start a journey to become a strong software engineer.

We welcome you all into the App Academy family!

- Make friends
- Join study groups
- Network