July- Day One Orientation (07/26)

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 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.

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 find opportunities for success at companies of all types and sizes, in many places domestically and around the world.

You will be a strong software engineer.

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 that 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

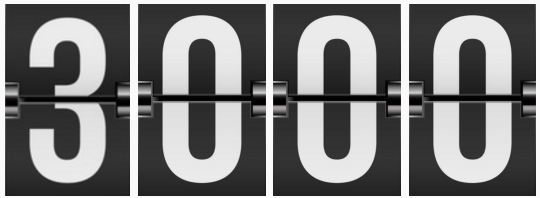
=

2021

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

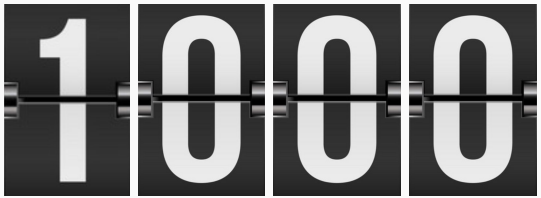
The Feedback Loop

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 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 graduation! 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

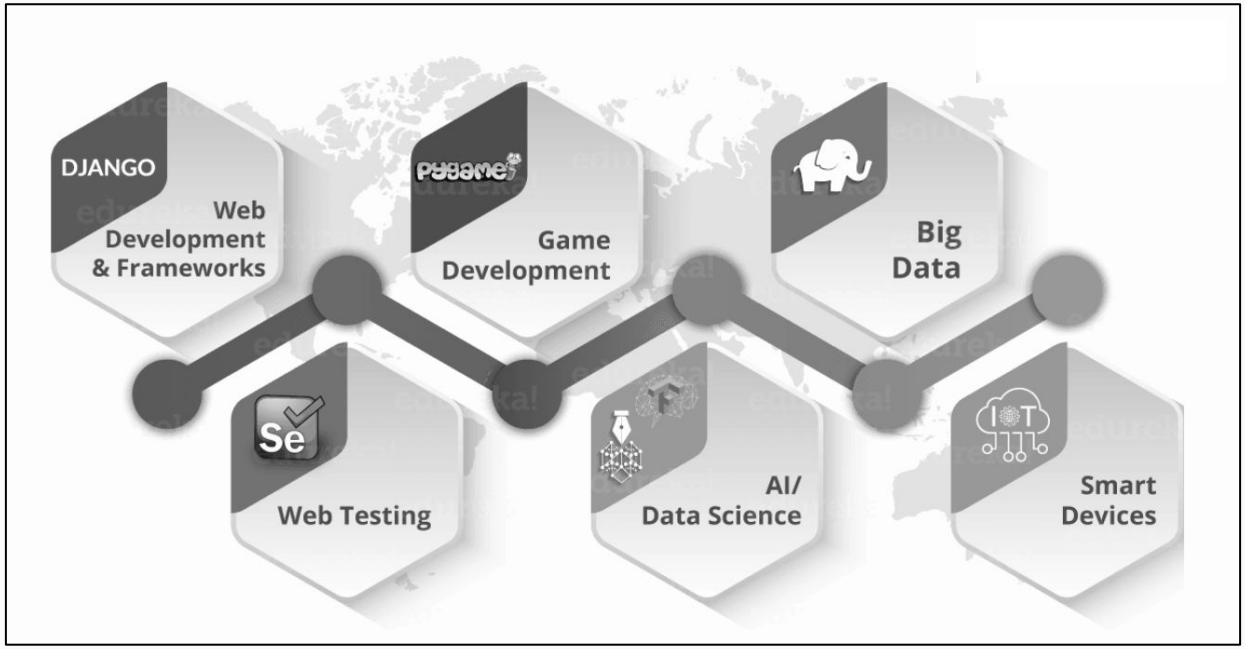
Why Python?

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.

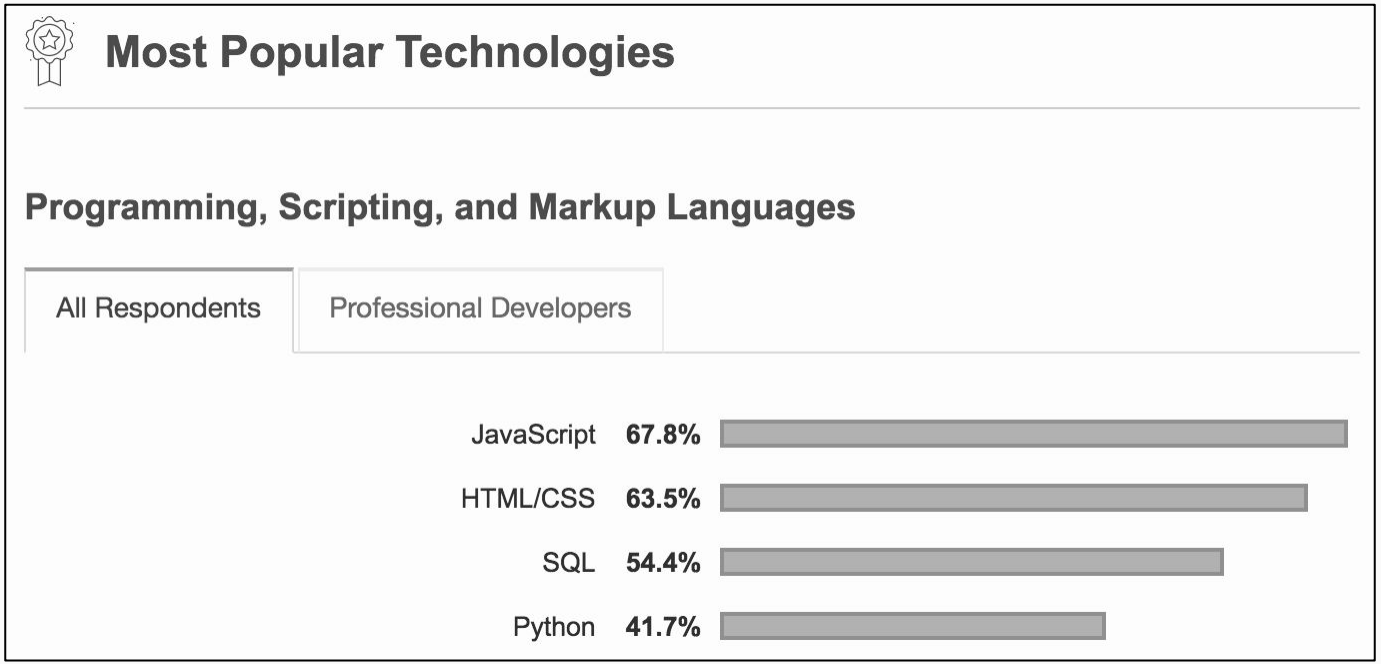
Why Python?

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, TDD, Data Structures, Algorithms	HTML, CSS, Front and Back End JS	Relational DBS, Express, Project!	React, Redux, Project!	React, Python, Project!	Portfolio & Job Search Strategies	Network, Study, Build, Apply, Get Hired!

*Schedule subject to change

The Modules, Organization and Strategy

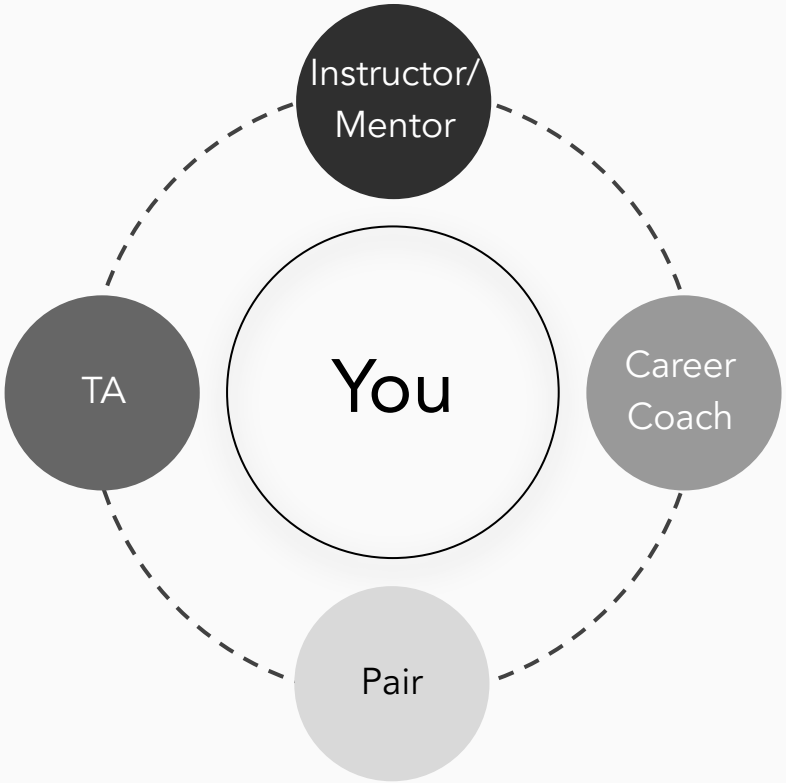
- Modules are organized by topic and goals
- Because these are different by module, each is taught a little differently
- Examples:
  - Module 1 teaches you the “nouns” and “verbs” of programming. It has lots of little practices and lots of repetition
  - Module 2 creates the foundation you need to think like an engineer and pass a technical interview. It has lots of interactive discussions centered around specific programming problems
  - Module 3 is the gateway to building interactive web applications. It’s centered around larger projects that build on one another

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

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

- Cohort 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
- Principal Technical Mentor
  - Will meet with the cohort at specified times throughout the program
  - Provides real-world software engineering methodologies

Your Cohort Support Team

While the instructional teammates will change for each module, I am your cohort lead and will be with you throughout the first 6 modules!

Professional Background:

- Graduated App Academy in 2019
- Worked in admissions before becoming an instructor
- B.S. in Business Administration from USC
- 10+ years of experience using software to create media
- Decided to learn how to build software and join aA

About Me:

- Located in Irvine, CA with my wife
- We love sushi and cats
- Avid skateboarder for 17 years
- Enjoys producing music (I also like to DJ)

Your Cohort Support Team

In addition to your Cohort leader and instructional staff, you will also have support from our Principal Technical Mentors. Meet Caleb Braaten!

Professional Background

- Coding for 10 years (Started with C++)
- B.A. in Law, Economics, and Public Policy
- Background in Information Technology
    - GCP Cloud Architect

Me!

- Puget Sound Native (Seattle)
- Casual Gamer (Stadia and Nintendo Switch)
- Favorite Fandoms: Disney, Galavant, Psych, LOTR, Alita: battle angel

Your Cohort Support Team

In addition to your Cohort leader and instructional staff, you will also have support from a Principal Technical Mentors. Meet Adrian Degraff!

Professional Background

- Software Engineer for 9 Years (Started in Java)
- B.A in Computer Science
- Background in Project Management and DevOps
    - Certified Kubernetes Administrator & Certified Scrum Master

Me!

- Originally from Siler City, North Carolina
- Bridge Player (SAYC w/ 2/1 GF) & Pool Player.
- Addicted to Game Shows (favorite: Legends of the Hidden Temple)

Your Cohort Support Team

Meet Sarah Rankin, our Student Resource Coordinator!

About Sarah:

- B.A. International Relations, Minor in Music
  - Graduated in 2018
- Background in student administration, financial services, and educational/recreational programs
- Love music! and have a pet gecko named Gooey (:

When to reach out:

- If you would like to know more about our Student Resource Groups or Student Events!
- If you are experiencing personal circumstances (in life or with a student) that may conflict with your education
- Email me at srankin@appacademy.io or Slack me!

Part II: The Job Search

Introduction to Career Quest & Job Search:
Anna Paschall

The Placements Team

Anna Paschall, Senior Manager - Placements

Mark Rodriguez, Manager Online - Placements + Technical Coach

Michael Norton, Technical Coach

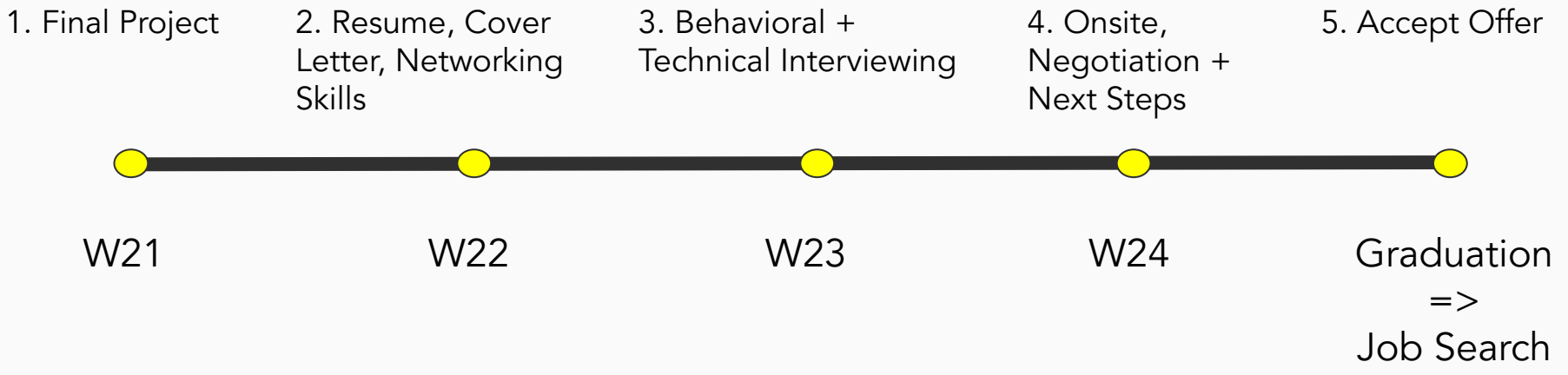
Michelle Carothers, Behavioral Coach

Allie Villarreal, Behavioral Coach

Tyna William, Technical Coach

Sam Stark, 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

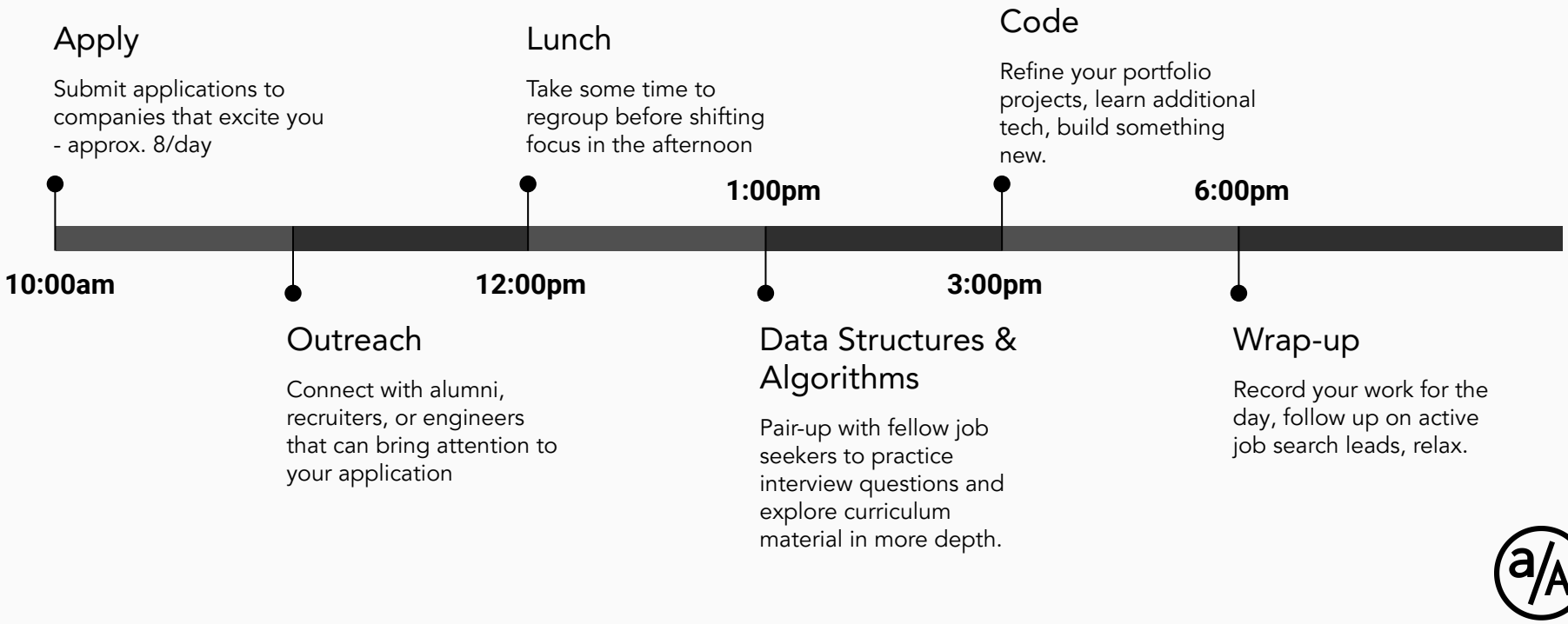
- 40+ Hours of work each week - the Job Search is a **full time job** and lasts an average of 6-8 months* post graduation - entirely dependant on the work you put in.

- 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!

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.

Your COC is in your enrollment agreement. We require you to read it through & hold you accountable for its contents.

Code of Conduct Highlights:

- Be professional at all times, including Discord conversations
- Be inclusive of everyone as well as their opinions and beliefs
- Be considerate and respectful to both students and staff
- Use your words with purpose and choose them carefully
- Keep your conversations workplace appropriate
- Keep your zoom backgrounds appropriate
- Don’t cheat

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.

INCLUSIVE = No Politics, No Judgements

- You are here to learn to code - not to discuss politics or judge others
- We focus on inclusive learning
  - ALL students have a right to learn in a safe and friendly environment
- 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.
- Directly test learning objectives and cover the previous week's material.
  - Specifics for each assessment will be discussed prior to you taking it
    - Allotted Time
    - Resources
    - Passing Points

Assessments and Deferrals

- You are allowed three opportunities to repeat a set of content.
  - 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 final alloted 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
    - Students
    - Staff
  - Not being at your workstation during class hours

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.

Introduction to Behavioral Health: David Young

Manager, Mental Health Design and Training

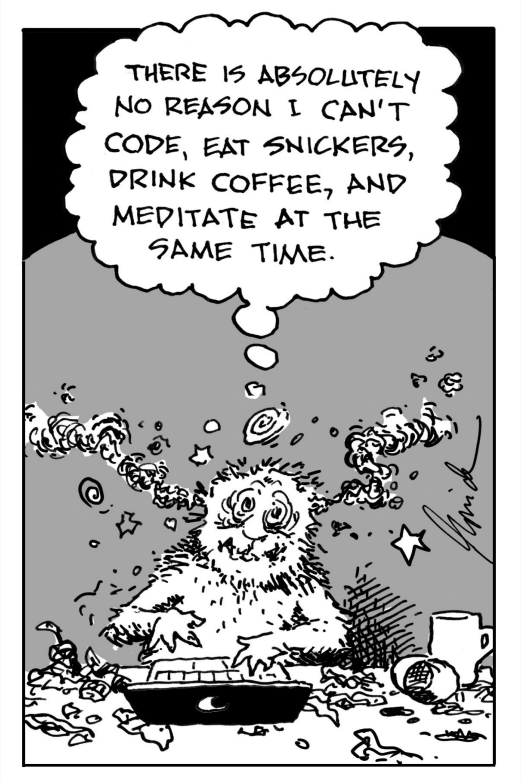
Manager for Mental Health Design and Training

Design: systems, programs, services

Deliver: trainings, consultation, assessments

Develop: internal resources, curriculum, collaborations with external service providers

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



MHDT Vision

AppAcademy students and job seekers will learn the psychological and self-management skills required to successfully navigate the mental and emotional challenges of being a software engineer. Any person 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 participants to ensure their success. MHDT provides assessments, consultation, curriculum development, trainings and BH resources to enhance students/job seekers, and support a/A staff.

Goal

Create a culture where mental health and well-being is a core value.

Behavioral Health = Mental Health and/or Substance Use

Student Behavioral Health Survey

Why? 1) To guide the development and continual improvement of student success trainings, soft skills development and support resources; 2) To identify healthy coping strategies that help students/job seekers succeed in the a/A program and in their future careers.

Who? All incoming students and new job seekers are expected to participate. Completing the survey is voluntary.

What? Survey asks about personal strengths, specific challenges, and how you approach stressful situations. Takes 5 min. to complete.

How is the data handled? Your responses are confidential. Group data is viewed by MMHDT and Data Analyst. No other a/A staff has access to this data. Stored under unique ID code.

When? Three times during the course of your program: Day one; near the end of your instruction phase; three weeks into your placement phase.

The Design

Instructional Design

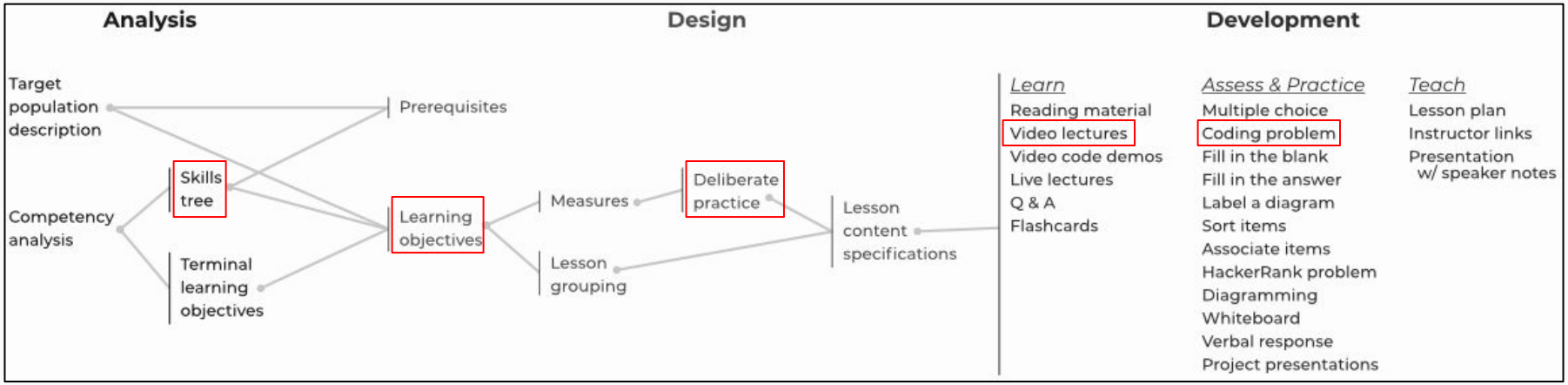
In·struc·tion·al de·sign

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.



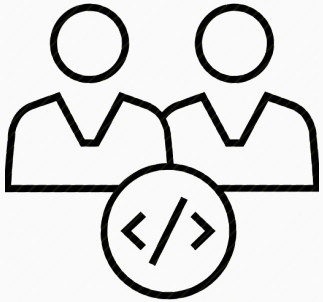
Lectures and Q&A

Every morning, you and your classmates will take part in a morning lecture, which is a mix of videos, coding practices, live lecture, and discussion. 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

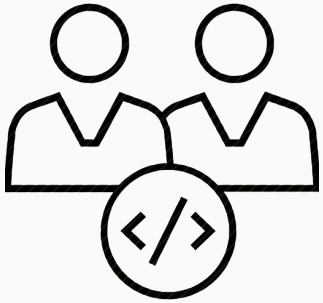


In the afternoon, you will pair-up with a classmate and work on collaborative projects that drive home the concepts from the morning's lecture. These are small, focused projects to reinforce skills.

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

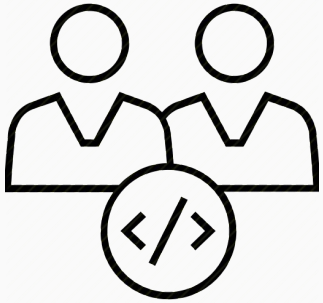


When you are stuck, it is imperative that you ask for help. The instructional team cannot assist you if they are not aware it is needed.

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

- Googling
- App Academy Open
- Investigating Error Codes
- Preparing a high-quality question

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 Group Project
- Week 16: React Solo Project
- Week 20: Python Group Project
- Week 21: Solo 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.

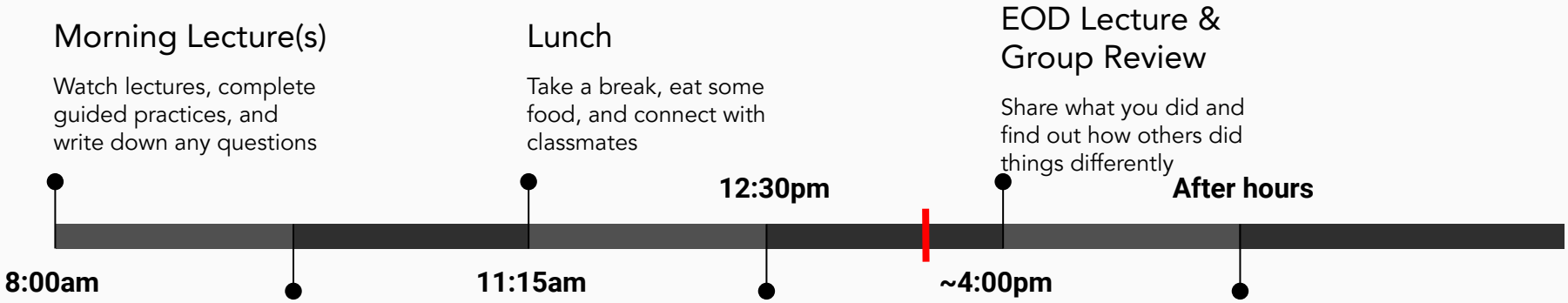
Instead of being dismissed from the program after failing an assessment, you can repeat the topics.

It is okay if you do not pass an assessment. You can be deferred.

This is not punitive - it is a feature so you can deep-dive!

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

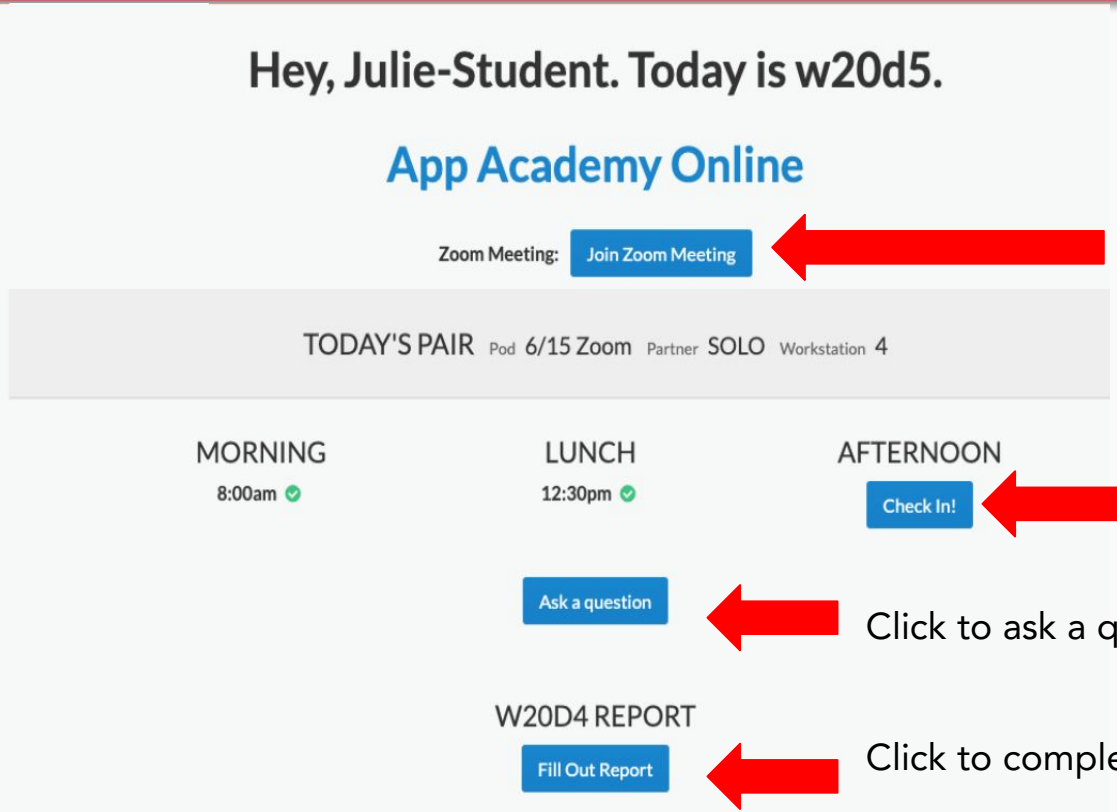
- Weeks
- Days
- Within Days:
  - Learning Objectives
  - Homeworks
  - Lecture
  - Practices

Progress Tracker (PT)

Using PT

- You will begin using this immediately after lunch today
- 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 60+ hours a week of studying to 60+ 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.

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