App Academy

SWE Campus Hybrid Overview

Agenda

- The Outcome
- The Curriculum
- The Design
- What to Expect

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.

A strong software engineer.

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 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.

Instructor Introductions

- Name
- Where you are from
- What you were doing before a/A
- Gender pronouns
  - he/him/his
  - she/her/hers
  - they/them/theirs

a/A

The Curriculum

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

That means:
- Becoming proficient in languages that drive the modern Internet: Ruby, SQL, JavaScript, HTML, and CSS.
- Using state-of-the-art tools and web frameworks like ReactJS, Redux, Rails, Express, and Node.js.

That also 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 Full Stack?

Companies now demand "Full Stack" 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. Knowledge of algorithms, data structures, and the components of networking and computing empower our graduates to efficiently identify and solve problems.

Additionally, these concepts are the keystones of many interviews. The computer science fundamentals you learn here will make you a better programmer and a stronger candidate for your first job.
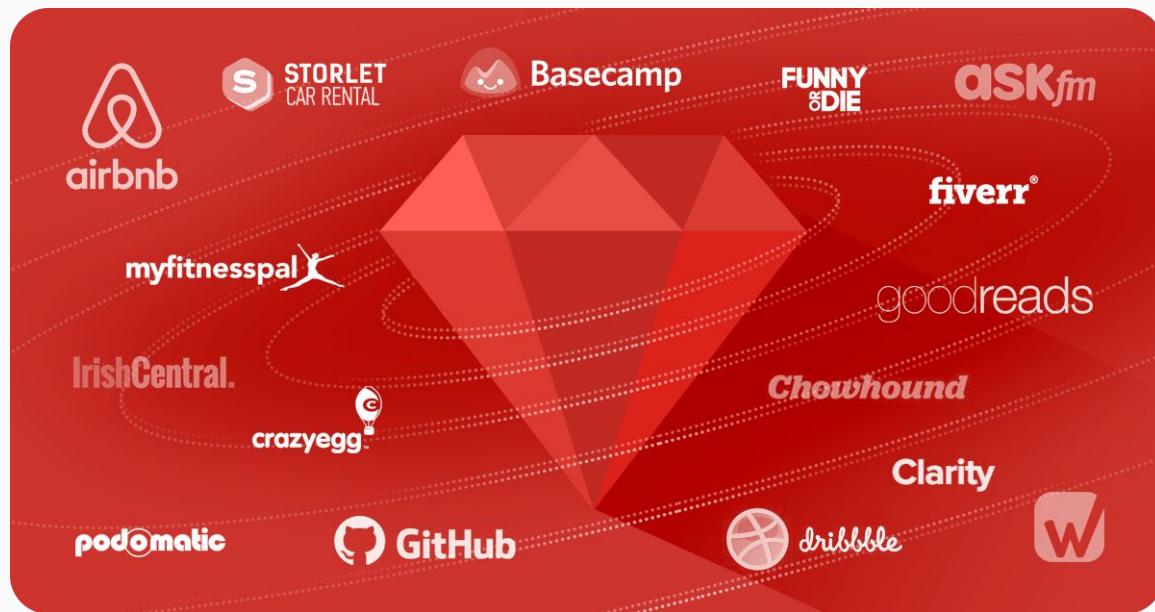
Why Ruby?

All software development is based on essential fundamental programming principles that are agnostic of language. Ruby is a robust and flexible programming language who's ease of use allows you to focus on those principles to become a confident programmer.

Ruby also powers Rails: a Full Stack web application framework that allows for rapid and reliable development of applications - the perfect tool for learning and building at the same time.

Why Ruby?

Ruby powers applications in diverse domains.

Why JavaScript?

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

The Modules, Weeks, and Topics

Foundations	Ruby	SQL + ORMs	Rails	Javascript	React	Full Stack	Career Quest
1 - 2	3 - 4	5	6 - 7	8 - 10	11 - 12	13 - 14	15 - 16
Programming Fundamentals	Computer Science	Back-End Fundamentals	Full Stack Fundamentals	Front-End Fundamentals	Modern UIs	Full Stack Project	Job-Search Prep

Post Graduation

After week 16 - you will officially have graduated from the 16 week program. A major accomplishment in its own right, however, your work will be far from over.

Unless you've finished all of your projects, you'll be required by your job coaches to make a 2 week "sprint", in completing your work from the program.

This means you should not make any plans for the 2 weeks post-graduation (as well as for the rest of the 16 week program).

Cohort Resources

Cohort Resources contains a wealth of information that will be relevant throughout your time going through the curriculum. It will include the following:

- Lecture slides and demos (placed there post-lecture for reference)
- Tips for Success
- Additional resources targeted at difficult topics

Cohort Resources Main Repo

The Design

Foundations

The first two weeks of the bootcamp is called Foundations. It is structured differently than the rest of the bootcamp to ensure that everyone is at a similar level when pair programming starts.

The entirety of Foundations will take place remotely via Zoom.

You will read materials and watch videos for homework, and finish assignments solo during the day. Instructors will be available for assistance by asking for help on Progress Tracker.

At the end of the day, an Instructor will review the day's material and answer questions.

Hybrid Learning

After Foundations, we will spend two days each week working in the office at 180 Geary St in San Francisco.

We'll release a detailed calendar ASAP but the general rhythm will be:

- Weeks 3 - 9: on site Monday and Tuesday
- Weeks 10 - 16: on site Thursday and Friday

There will be a reservation system for anybody that wants to work from the office on Wednesdays.

Lectures

After Foundations, you and your cohort-mates will start most days with a lecture on the day's subjects.
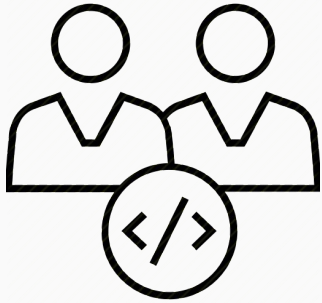
The lecture will be given from an App Academy Instructor either in-person or via zoom.

These lectures are your opportunity to absorb the necessary concepts and tools that you will later put into practice.

Projects and Pair Programming

In the afternoon, you will pair-up with a cohort-mate and pair program - work on practical projects that drive home the concepts from the morning's lecture.

Working with others is a regular part of software development. Learning to communicate with and adapt to different people on projects is essential.

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

Flex Time

You spent the day working through different projects to master key concepts.

Now, reflect on what you just accomplished by talking about it with your classmates in a group setting.

Share what you did during the day. Find out how others did things differently. Gain a wider perspective on the material by synthesizing experiences with your classmates.

Portfolio Projects

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

Most importantly, these projects are what will GET YOU A JOB!

This course contains three portfolio projects:

- The Javascript Project
- The Full Stack Project
- The MERN Stack Project

Assessments

Assessments are designed to test and ensure the mastery of knowledge needed to continue on in the course.

Because every concept taught at App Academy is the foundation of every subsequent concept, demonstrable understanding is essential.

There are two types of Assessments at App Academy
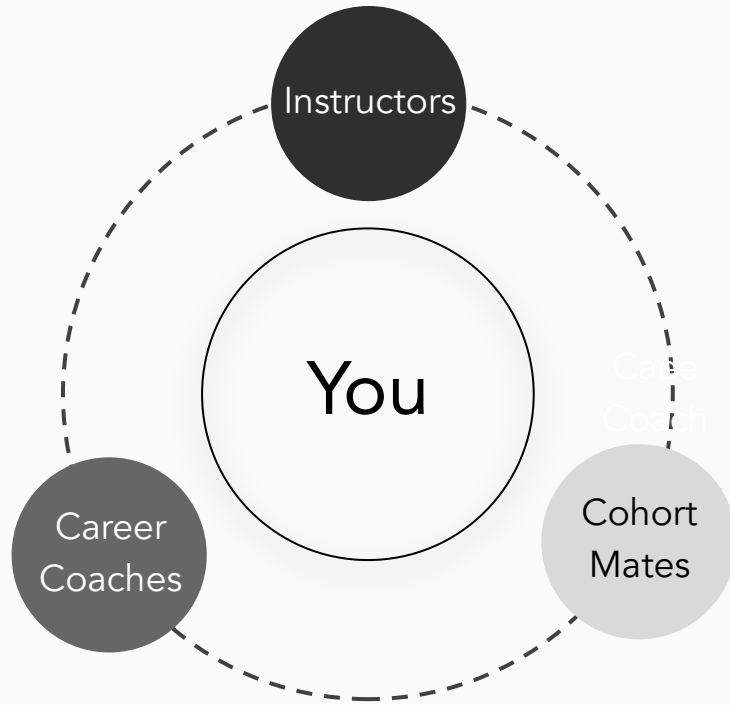
Assessments

Foundations Assessments

- Your first two assessments
- Designed to test your mastery of fundamental programming skills necessary for the rest of the course

Academic Assessments

- 6 Assessments based on each module of content
- Designed to test your mastery of each module - essential for being able to continue in the course

Your Support Team

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

Your pairs (cohort-mates) round-out the team.

Your Support Team

- Instructor
  - A top graduate of our program
  - Daily support from someone who has walked in your shoes
- Career Coach
  - Experienced career advisor
  - Will meet with you throughout your job search
- Behavioral Health Specialist and Support Resources
  - Clinical Psychologist
  - Available to meet with students upon request

Your Support Team

You'll notice that we'll sometimes bring in new teammates or rotate teammates. This could be to offer additional help, leverage a teammates subject matter expertise, or simply because of vacation or illness.

We always do this to protect and/or improve your cohort dynamic.

Student Resource Groups (SRG's)

- WTGNC
- LGBTQ+
- a/A Parents
- Students with Disabilities
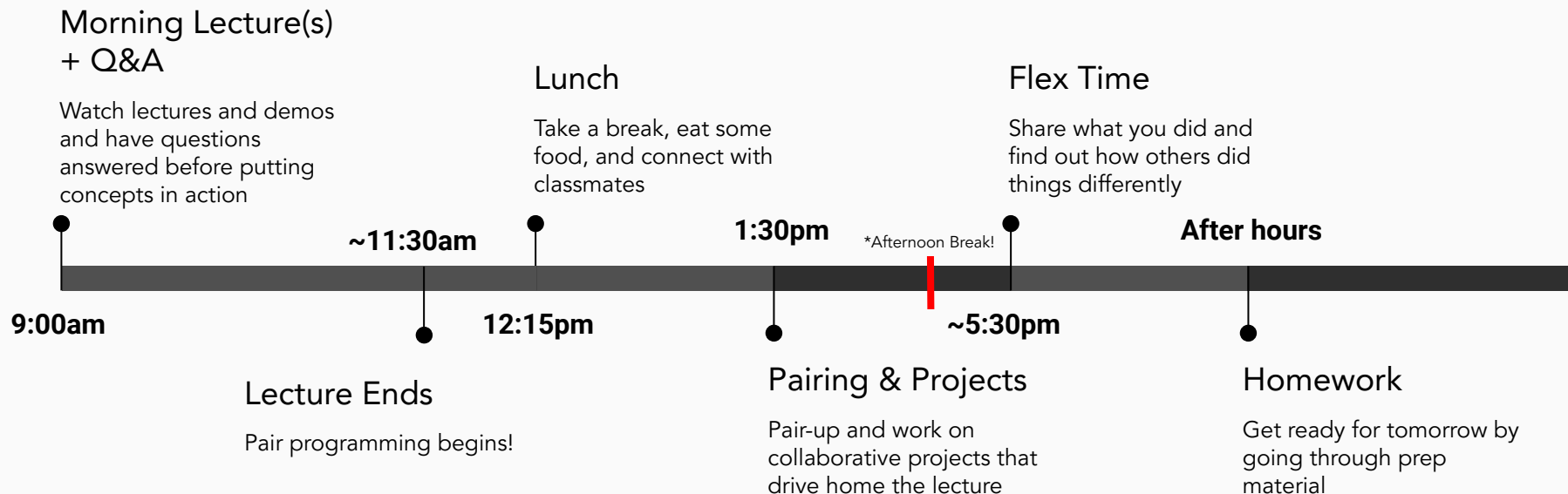- Black, Indiginous, and Latinx
- Asian

More info to come on these after Week 2

What to Expect

Daily Schedule

Morning Lecture(s) + Q&A

Watch lectures and demos and have questions answered before putting concepts in action

Lunch

Take a break, eat some food, and connect with classmates

Flex Time

Share what you did and find out how others did things differently

~11:30am

1:30pm

*Afternoon Break!

After hours

9:00am

12:15pm

~5:30pm

Lecture Ends

Pair programming begins!

Pairing & Projects

Pair-up and work on collaborative projects that drive home the lecture

Homework

Get ready for tomorrow by going through prep material

All times PT

a/A

Daily Logistics

- When is attendance taken:
  - 9am ET
  - 1:30pm ET
  - 4:00 pm ET
- Breaks:
  - 12:15 - 1:30pm ET
  - 3:45 - 4:00pm ET

App Academy Open

open.appacademy.io

- Modules
- Tasks/Days
- Within Days:
  - Materials
  - Additional Resources
  - Homeworks
  - Projects
  - Bonus Projects

Strikes

- A strike is an indicator of work missed and we use them to record time away from the learning environment
- Strikes are also a foundation of accountability for you to this program
- The strike limit for this course is 10
- Top reasons for getting strikes:
  - Missing check-in
  - Not communicating about missing check-in
  - Not filling out nightly report
  - Having phone out during lecture/pairing time
  - Being disruptive or unaccountable to your pair for the day

Code of Conduct

Generally, you can sum up our code of conduct into main points:

- Respect for others in a professional environment
  - App Academy is a professional work environment
  - Show respect and empathy towards staff and students alike
- Integrity and dedication to your work
  - Follow instructor direction
  - Do your classwork and homework
  - (No cheating or plagiarism)
  - Devote your time fully to this program

Online/Zoom Etiquette

- Please have your camera on and face fully visible during lecture, flex times, and pairing

  The Zoom Meeting is available after hours and is a great place to continue working with others after class has ended

Progress Tracker (PT)

progress.appacademy.io

- Asking questions
- Filling out nightly reports
- Checking your stats

Communications

Extremely important

- Slack
- Google Group
- Zoom

Bootcamp life is intense, but things come up (it's life). Be communicative, stay in touch, and everything will be good.

Daily Project Expectations

- The projects are a chance to implement the concepts taught in readings and lectures
- You are NOT required, or expected, to complete every project.
- You are supposed to struggle through them, ask questions when necessary, and learn how to debug and problem solve
- You may not use solutions to get through them

Assessment Expectations

- 8 total assessments administered throughout the curriculum
  - 2 Foundations Assessments
  - 6 Academic Assessments
- You are allowed to fail any of the two foundations assessments 1 time
  - After the first fail, you will be deferred to the next cohort
  - This is a chance to really prepare for the challenge of App Academy
  - If you fail another Foundations Assessment, you will be dismissed from App Academy - our program just isn't right for you.

Assessment Expectations

- You are allowed one fail of any Academic Assessment with no change in your standing within the course
- If you fail a second Academic Assessment, you will be given a re-take of that assessment that same day in the afternoon
  - This is your opportunity to show the fail was a fluke
- If you fail the retake, you will be dismissed from App Academy
- If you pass the re-take, you will stay in the course
- If you fail one more assessment after that, you will be dismissed from App Academy

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 three projects will require a <u>minimum level of completion by graduation</u> and will need to be 100% complete before you are approved to start your job search
- Completion is be determined by your Instructors and your Career Coaches
- Minimum Completion expectations during the program are:
  - JavaScript Project: 75-80%
  - Fullstack Project: 65%
  - MERN Group Project: 75%
- You will showcase your projects to other students
- Your projects will be hard, but, when we get there, you will be ready!

Weekly Surveys

We will administer weekly surveys for you to anonymously give feedback on multiple aspects of the course, your experience, and advice for us on how we can do things better.

Campus

- Our campus is located on the 2rd floor at 90 5th Ave., New York, NY
  - The entrance is on 14th St.
- Each day in person, you'll need to reserve a spot and check in on [Eden](#), which will ask you to fill out a wellness survey. We want to avoid potential covid outbreaks so please be honest when answering the questions! We are prepared to make accommodations for you in the event that you can't come in to the office.
  - We will have a signup day scheduled in the second week of Foundations for all of us to reserve our spots for the remainder of the cohort.
- Currently, masks are required while in the office
- The office opens at 8:30am and is open until approximately 9pm provided a Campus Hybrid instructor is present
  - After 6pm, all students must exit with the last remaining Campus Hybrid instructor

Bootcamp Life

- Can be frustrating and overwhelming
  - Will likely make you uncomfortable
  - Get comfortable with being uncomfortable
  - Cultivate a growth mindset! (Don't compare yourself)
- We're all in this together
  - Lean on each other, ask each other for help
- This is your journey to become a software developer
  - We are here to support you on that journey as much as we can
  - Your hard work will define your success
- We can do it! You can do it! You are doing 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 and your cohort into the App Academy family!

Student Introductions

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