AWS GetIT Program Curriculum

AWS GetIT Program Overview

AWS GetIT is a fully-funded, flexible education program and competition designed to inspire all 12- to 14-year-old students, especially girls and other young people from underrepresented communities, to consider a future career in STEM (Science, Technology, Engineering, Mathematics). The program introduces students to the cloud, different types of careers in tech, and how cloud-based tech is used to solve real-world problems. Schools, educators, and students receive support throughout the program from AWS GetIT Ambassadors.

Intended Audience

All sections in the curriculum are intended for:

- Students who are at least 12-14 years and attend secondary schools
- Educators who teach students in secondary schools

Available Languages

The program is available in the following languages: English (US), English (UK), English (Australian), Spanish (Spain), Spanish (LATAM), German, Hebrew, Arabic, Italian, French (France), Greek, Welsh, Ukrainian, and Polish.

Ambassador Support

Each school participating in AWS GetIT is paired with an AWS GetIT Ambassador. AWS GetIT Ambassadors are tech professionals who are connected to historically underrepresented communities and want to be role models who inspire the future generation of inclusive and diverse tech leaders. The program curriculum includes three different touch points where your ambassador can directly support you with the program, either online or in-person. Ambassadors introduce the students to AWS GetIT via a kickoff presentation and assist student teams with their competition submission, while providing ongoing support to ensure educators and students get the most out of their experience. To prepare for your AWS GetIT Ambassador, your collaborating organization will help schedule your engagement.

Recommended Delivery Method and Timeline

AWS GetIT curriculum is designed to be facilitated by an educator is ready for delivery in-person, virtually, online, or offline. Educators should register for the program at the beginning of the academic year and can decide to deliver and complete the program in three to six months, with an option to enter a country-wide competition in April. Each educator who has signed up for the program will receive a login via their Collaborating Organization. Educators must provide their email address, and how many anonymous student logins they require (this is unlimited and can be as many as an educator requires). At the start of the program, educators will receive suggested timetabling and timelines, lesson/project plans, and check lists to help them decide how to deliver the program in their curriculum or as an extra-curricular activity.

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aws GetIT

Curriculum Overview

Intended for 12- to 14-year-old students, educators can deliver AWS GetIT curriculum's eight main sections, plus two optional supplemental sections in a classroom setting over three to six months. Sections feature a combination of instructional content, videos, activities and exercises, handouts, games, and quizzes.

The program curriculum is available in 14 languages, and is ready for delivery in-person, virtually, online, or offline. If delivering offline, educators must be able to access AWS GetIT's learning management system to download the content. Worksheets can also be downloaded, so educators can grade portfolios as part of their curriculum/classes or to support selecting a team idea to submit for the program's competition.

The curriculum explores environmental and social issues to support students as they prepare to work in teams. The teams will work together to pick an app idea and design an app wireframe that solve problems in their communities. As they brainstorm their app ideas and prepare to present their wireframe to the larger group, students are empowered to use their unique perspectives and experiences come up of solutions that benefit others in their school or community rather than their own personal interests.

AWS GetIT Curriculum Sections

Section 1: Welcome to AWS GetIT

Section 2: Starting your App Design - Technology Careers and Skills

Section 3: Designing your App - The Design Thinking Cycle

Section 4: Understanding Apps - What is the Cloud

Section 5: Designing Your App - Sustainability and Accessibility

Section 6: Designing Your App - Emerging Technologies

Section 7: Finalizing Your App Design

Section 8: The AWS GetIT Journey: Wrap Up

Supplemental Sections:

- Learn more about Cloud Technology – enrichment activities
- Additional Resources

Students will leverage the foundational skills they've learned, including cloud basics, elements of design thinking, proof of concept, storyboarding, and research methods for idea viability. With support from AWS GetIT Ambassadors and inclusive language throughout the program content, students are encouraged to ensure equitable collaboration with each other as they design their app ideas.

After completing the program curriculum, schools can submit one student app idea for consideration in a country-wide competition. Teams with ideas in the finals present to a judging panel of experts in the tech industry.

Technical Requirements

To digitally access the online curriculum content to deliver to students, technical requirements include:

- Access to a laptop (Windows, Mac, Linux, or Chromebook)
- Access to internet connection
- Access to *.aws.amazon.com prior to teaching the unit *(Educators should ask the school district's Network Administrator for assistance.)*

To access offline content, educators and students can download PDFs via AWS GetIT's learning management system Canvas.

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Curriculum Section Overview

Below shows what's included in each section of the AWS GetIT curriculum. For details about each module, see Appendix A.

SECTION 1: Welcome to AWS GetIT		
Program introduction and examples of different job roles in technology and how tech can be used in everyday life.		**45 minutes**
MODULE	**TYPE**	**TIME**
Welcome to AWS GetIT	*Video*	3 min
Getting Started: Program Guide	*Handout*	5 min
Using Technology: Laura's Day	*Learn*	3 min
Examining Different Technology Roles	*Learn*	2 min
AWS GetIT Journey Portfolio: An Overview	*Presentation*	5 min
Ambassador Touchpoint – Kick off presentation (online or in person)		
Your AWS GetIT Ambassador presents what the program is, how they got into technology, why they aim to inspire students, and get them excited about taking part in the program and competition! This can be organised before, during or after this section.		20 min

SECTION 2: Starting Your App Design – Technology Careers and Skills		
Introduction to app design technical skills; soft skills (i.e., communication, conflict resolution and emotional awareness); diversity, teamwork, inclusion, and equity; and how to start brainstorming ideas. Students or Teachers can choose who they want to work with in teams for the Group Activity and Presentation Exercise.		**2 hours**
MODULE	**TYPE**	**TIME**
Technical Skills for App Design	*Learn*	4 min
What are Soft Skills?	*Learn*	3 min
Diversity and Teamwork	*Learn*	3 min
Intro to Brainstorming	*Activity*	15 min
Teamwork Skills: Listening	*Activity*	2 min
Can You Spot a Good Listener?	*Quiz*	3 min
A Strong Team with a Bright Mission	*Group Activity #1*	25 min
Your Team and Idea	*Presentation Exercise #1*	15 min

SECTION 3: Designing Your App – The Design Thinking Cycle		
Introduction to the four stages of the Design Thinking Cycle. Students should collaborate together in their groups using listening skills to brainstorm app ideas and choose one of the ideas to move forward with.		**30 minutes**
MODULE	**TYPE**	**TIME**
Put on Your Design Thinking Cap	*Video*	1 min
The Design Thinking Cycle	*Learn*	5 min

Design Thinking: Empathize and Design	*Learn*	5 min
Design Thinking: Ideate	*Learn*	5 min
Design Thinking: Prototype	*Learn*	5 min
Design Thinking: Test	*Learn*	5 min
Knowledge Check: Put On Your Design Thinking Cap	*Quiz*	3 min
Ambassador Touchpoint – Bootcamp (Online or in Person)		
Your ambassador will deliver a 'Design Thinking Bootcamp,' which introduces students to different concepts in this section that are needed when designing apps and working backwards from a problem. Ambassadors will help students to think big, refine their ideas and define their user. This can be delivered before during or after this section.		60 min

SECTION 4: Understanding Apps - What is the Cloud?		
Introduction to the cloud, its benefits, and its significance in the world of technology. This can be covered individually or as a team.		**15 minutes**
MODULE	**TYPE**	**TIME**
The Mystery of the Cloud	*Video*	1 min
Introduction to the AWS Cloud	*Video*	3 min
The Cloud and You	*Learn*	4 min
Benefits of the Cloud	*Learn*	4 min
Knowledge Check: Benefits of the Cloud	*Quiz*	3 min

SECTION 5: Designing Your App - Sustainability and Accessibility		
The first half of this module focuses on sustainability and accessibility and how app ideas can benefit local communities, socially and environmentally. The Group Activity, Design and Presentation Exercise take approx. an hour and focus on using what the students have learnt about accessibility to start designing their app wireframe.		**2 hours**
MODULE	**TYPE**	**TIME**
Case Study 1: The Natural History Museums Urban Nature Project	*Video*	5 min
Improve People's Live with Technology	*Video*	2 min
The Internet of Things (IoT)	*Learn*	5 min
Accessibility and Mobility Challenges	*Activity*	5 min
Improving the Quality of Life through Sustainability	*Learn*	5 min
Global Environmental and Climate Challenges	*Learn*	5 min
Amazon Sustainability Initiatives	*Learn*	5 min
Benefits of Cloud Computing on the Environment	*Learn*	5 min
Improving the Quality of Life through Accessibility	*Learn*	5 min
Understanding Assistive Technology	*Activity*	5 min
Knowledge Check: Improve People's Lives with Technology	*Quiz*	2 min
Case Study 2: Studying Nature in the Natural History Museum Wildlife Garden	*Video*	5 min

Designing Your First App	*Group Activity #2*	25 min
Mock Up Your App, Getting Started	*Design Exercise #1*	10 min
Ideas and Tech	*Presentation Exercise #2*	15 min

SECTION 6: Designing Your App - Emerging Technologies		
In this section students learn about emerging technologies like AI, Machine Learning and Augmented Reality are introduced to different AWS technologies. Students have three activities to work through before their group activity where they create a storyboard and add more detail to their app wireframe.		**2 hours 30 minutes**
MODULE	**TYPE**	**TIME**
Case Study 3: the Natural History Museums Nature Overheard	*Video*	5 min
Dancing Robots: An Intro to Inputs and Outputs	*Activity*	2 min
Artificial Intelligence and Machine Learning	*Learn*	5 min
Race to the Stars: An AI/ML Knowledge Check	*Quiz*	3 min
Teamwork Skills: Communicating and Problem Solving	*Activity*	15 min
AWS GetIT Tech Card Videos	*Video*	12 min
Key Concepts in App Design	*Learn*	5 min
Telling A Story Using Data	*Learn*	6 min
Using Word Webs	*Group Activity #3*	20 min
Augmented Reality: An Introduction	*Game*	5 min
A Closer Look at Augmented Reality	*Learn*	5 min
Case Study 4: How Nature Overheard Works	*Video*	5 min
Mock Up Your App	*Group Activity #4*	35 min
Mock Up Your App, Deep Dive	*Design Exercise #2*	15 min

SECTION 7: Finalizing Your App Design		
In this final section's students finalise their wireframe design, looking at and gathering feedback on their idea to revise and test their idea. The last part of the design thinking cycle. At this point, students should focus on getting as much feedback from different user groups as they can and work on their final presentation. (See additional resources for groups to use and present their ideas back to their classes/school/ambassador – 'Ten tips for presenting your app design handout')		**3 hours**
MODULE	**TYPE**	**TIME**
Creating a Minimum Viable Product	*Activity*	30 min
Wireframing	*Presentation Exercise #3*	30 min
Mock Up Your App, Using Feedback	*Design Exercise #3*	30 min
Gathering Feedback	*Group Activity #4*	30 min
Revising Your App	*Presentation Exercise #4*	30 min
Introducing... Your App!	*Presentation Exercise #5*	30 min

Ambassador Touchpoint – Optional (Online or in Person)		
Invite your ambassador to review and give feedback on the teams' final app ideas. To help the class decide, consider holding an internal competition (like 'Dragons Den/Shark Tank') to help decide which team's idea is submitted to the competition.		30 min

SECTION 8: The AWS GetIT Journey: Wrap-Up		
A final video to congratulate students and celebrate their app designs. Certificates of completion are available.		**5 minutes**
MODULE	**TYPE**	**TIME**
Wrap-up	*Video*	5 min

SUPPLEMENTAL SECTION: Learn More About Cloud Technology		
This section includes additional modules about cloud technology that students might be interested in learning about like Robotics, Machine Learning and Marketing your ideas.		**1 hour**
MODULE	**TYPE**	**TIME**
Technology Trivia	*Game*	3 min
Careers in Tech	*Learn*	4 min
Robotics in Everyday Life	*Game*	8 min
AI/ML and Self-Driving Vehicles	*Learn*	5 min
Machine Learning with AWS Deep Racer	*Video*	4 min
See the World with Oscar: A Virtual "Virtual Reality" Journey	*Game*	15 min
Amazon's recommendation algorithms	*Learn*	3 min
Recommendation Systems in Everyday Life	*Learn*	7 min
Marketing Your Ideas	*Activity*	15 min

SUPPLEMENTAL SECTION: Additional Resources		
These resources are available to download and complete as part of teams' portfolios.		**1 hour 45 minutes**
MODULE	**TYPE**	**TIME**
Presentation Rubric	*Handout*	1 min
A Strong Team with a Bright Mission Worksheet	*Group Activity #1*	20 min
Design Your 1st App Worksheet	*Group Activity #2*	20 min
Wireframe Your App Worksheet	*Group Activity #3*	20 min
Feedback Worksheet	*Group Activity #4*	20 min
Ten Tips for Presenting Your App Design	*Handout*	20 min

Appendix

Appendix A: Detailed Curriculum Outline

SECTION 1: Welcome to AWS GetIT		
Program introduction and examples of different job roles in technology and how tech can be used in everyday life.		**45 minutes**
MODULE	**TYPE**	**TIME**
Welcome to AWS GetIT *The first stop in your journey! Enjoy the welcome video and learn more about the program, the AWS GetIT Ambassadors, and more!*	*Video*	3 min
Getting Started: Program Guide	*Handout*	5 min
Using Technology: Laura's Day *Follow Laura, a typical student living in a large city, as she goes through her day interacting with different kinds of technology. Examine how tech is a part of her life from waking up to going to bed.*	*Learn*	3 min
Examining Different Technology Roles *There are quite a few individuals involved with creating and maintaining the technology that makes Laura's Day possible. Take a peek at some of those roles, and get an idea of future potential careers.*	*Learn*	2 min
AWS GetIT Journey Portfolio: An Overview *As you progress on your AWS GetIT journey, you will be asked to reflect on some of the new ideas that you have learned. When you're done, you'll have a full presentation. Learn more about it, and how it will be evaluated.*	*Presentation*	5 min
Ambassador Touchpoint – Kick off presentation (Online or in person)		
Your AWS GetIT Ambassador presents what the program is, how they got into technology, why they aim to inspire students, and get them excited about taking part in the program and competition!		20 min
SECTION 2: Starting Your App Design – Technology Careers and Skills		
Introduction to app design technical skills; soft skills (i.e., communication, conflict resolution and emotional awareness); diversity, teamwork, inclusion, and equity; and how to start brainstorming ideas. Students should work in teams for the Group Activity and Presentation Exercise.		**2 hours**
MODULE	**TYPE**	**TIME**
Technical Skills for App Design *In many cases, it's better to have help than to try to go at it alone. Examine four different types of technical skills necessary*	*Learn*	4 min

for your app's success. Look for individuals with these skills when building your app design team.		
What are Soft Skills? *Employers continually stress that they are looking for soft skills in someone they want to hire. What are these soft skills? What should you look for in assembling your app design team?*	*Learn*	3 min
Diversity and Teamwork *When picking teams, it's natural to want to work with your friends or people you know have similar interests. But did you ever stop to think how the characteristics that make us different from each other can actually be used to build an even stronger team?*	*Learn*	3 min
Intro to Brainstorming *Brainstorming is a fun part of the design thinking process. Learn new strategies and different ways to complete the process!*	*Activity*	15 min
Teamwork Skills: Listening *Being a good listener takes practice! Learn more about listening and understanding with empathy, as well as how to ask questions and pose problems.*	*Activity*	2 min
Can You Spot a Good Listener? *Have you ever had a conversation with a friend and they thought you said something that you actually did not say? Were they paying attention? Check your understanding of listening visual cues.*	*Quiz*	3 min
A Strong Team with a Bright Mission *It's time for you and your teammates to make some big decisions. These decisions will guide you through the rest of this journey, so choose wisely.*	*Group Activity #1*	25 min
Your Team and Idea *Design your first two presentation slides. The first will present your team, the second will cover the problem you want to solve. Don't forget to be creative!*	*Presentation Exercise #1*	15 min
SECTION 3: Designing Your App – The Design Thinking Cycle		
Introduction to the four stages of the Design Thinking Cycle. Students should collaborate together in their groups using listening skills to brainstorm app ideas and choose one of the ideas to move forward with.		**30 minutes**
MODULE	**TYPE**	**TIME**
Put on Your Design Thinking Cap *As with any technology tools, creating an app takes a collaborative team, special technical skills, and lots of knowledge*	*Video*	1 min

about the users. The process that you can use to build, test, and quickly update your ideas is called design thinking.		
The Design Thinking Cycle *Design thinking is a way for people to create unique and inventive ways to solve real-world problems by focusing on empathy, creativity, and collaboration. Learn more about the 5 parts of the cycle.*	*Learn*	5 min
Design Thinking: Empathize and Design *When you empathize, you share and understand feelings others have. You take that understanding and use it to identify a problem you want to solve. Use these first two steps in the design thinking process to get started.*	*Learn*	5 min
Design Thinking: Ideate *To ideate is to imagine a solution to the problem you want to solve. Learn how to use humour to become a great teammate, as well as working backwards in order to move forwards.*	*Learn*	5 min
Design Thinking: Prototype *Creating a prototype is an important part of the design thinking cycle because it allows you and your team to share a representation of your app with your stakeholders. Learn more about wireframing.*	*Learn*	5 min
Design Thinking: Test *Testing is important because you work with users and stakeholders to gain insights and feedback for your idea. Examine more information about feedback and how you can learn from your testers.*	*Learn*	5 min
Knowledge Check: Put On Your Design Thinking Cap *Think you know the basics of the design thinking cycle? Test your knowledge here!*	*Quiz*	3 min
***Ambassador Touchpoint – Bootcamp (Online or in Person)**		
Your ambassador will deliver a 'Design Thinking Bootcamp,' which introduces students to different concepts needed when designing apps and working backwards from a problem.		60 min

SECTION 4: Understanding Apps - What is the Cloud?

Introduction to the cloud, its benefits, and its significance in the world of technology. This can be covered individually or as a team.		**15 minutes**
MODULE	**TYPE**	**TIME**
The Mystery of the Cloud *What is the cloud? What are the benefits to using it? This short kick-off video will give you some insight into what you will be learning about in this section.*	*Video*	1 min

Introduction to the AWS Cloud *Amazon Web Services has a long history with the cloud. Learn how it functions through a brief video overview.*	*Video*	3 min
The Cloud and You *You probably use the cloud way more than you know! Take a look at just some of the ways the cloud impacts your life on a day-to-day basis.*	*Learn*	4 min
Benefits of the Cloud *The cloud seems all well and good, but really, what is the benefit? See how the power of the cloud is harnessed to make sure information, data, and services are always available for users.*	*Learn*	4 min
Knowledge Check: Benefits of the Cloud *So, you think you know the cloud? Use this knowledge check to see if you can call yourself a cloud expert.*	*Quiz*	3 min

SECTION 5: Designing Your App - Sustainability and Accessibility

The first half of this module focuses on sustainability and accessibility and how app ideas can benefit local communities, socially and environmentally. The Group Activity, Design and Presentation Exercise take approx. an hour and focus on using what the students have learnt about accessibility to start designing their app wireframe.		**2 hours**
MODULE	**TYPE**	**TIME**
Case Study 1: The Natural History Museums Urban Nature Project *It has never been more important to make our towns and cities healthy and sustainable places to live. Watch this video to learn about the Urban Nature Project that the Natural History Museum in the UK is leading in partnership with AWS.*	*Video*	5 min
Improve People's Live with Technology *Today's technology exists and evolves to simplify and automate daily tasks. This short kick-off will prepare you to start thinking about how technology can help us improve our world and the quality of life of those who live on it.*	*Video*	2 min
The Internet of Things (IoT) *Did you know that today, traditional items like light bulbs now can access the internet? The Internet of Things, or IoT, makes it possible to use the cloud to take care of many simple tasks to make life easier for all.*	*Learn*	5 min
Accessibility and Mobility Challenges *Individuals with accessibility and mobility challenges can get help from their friends! Meet Oscar, a service guide dog who*	*Activity*	5 min

assists Emily, a vision-impaired young lady, though her day at school using both his training and some supportive technology.		
Improving the Quality of Life through Sustainability *Technology can be used to try and help solve some of the problems facing our Earth today. Look at some of the ways it's currently being used to address sustainability issues.*	*Learn*	5 min
Global Environmental and Climate Challenges *What are some of the specific challenges facing our Earth today, and is there a way that technology can help address them?*	*Learn*	5 min
Amazon Sustainability Initiatives *Examine what Amazon as a company is doing to try and meet the broad responsibility that comes with growth over the years.*	*Learn*	5 min
Benefits of Cloud Computing on the Environment *The cloud makes it easier for us to watch movies, listen to music, and share data. But did you know that cloud computing also has some definite benefits for the environment as well?*	*Learn*	5 min
Improving the Quality of Life through Accessibility *Technology has always had a place in trying to even the playing field for all individuals. Examine the different ways current technology is being used to assist those who might need a helping hand.*	*Learn*	5 min
Understanding Assistive Technology *Although assistive technology is out there, you may not have had much experience with it. This module allows you to experience some of the different things that content creators keep in mind when trying to make sure all individuals can use their materials.*	*Activity*	5 min
Knowledge Check: Improve People's Lives with Technology *After your journey through this section, see if you truly understand how technology, sustainability, and accessibility are connected!*	*Quiz*	2 min
Case Study 2: Studying Nature in the Natural History Museum Wildlife Garden *Learn how the Natural History Museum in the UK is studying nature in their wildlife garden and effects of urbanisation on nature.*	*Video*	5 min
Designing Your First App *Starting in your groups, you'll finalize your app's title, function, and audience. Then it's time to start thinking about design and function.*	*Group Activity #2*	25 min
Mock Up Your App, Getting Started	*Design Exercise #1*	10 min

Here's your chance to use a computer and start playing with designing an app's visual look. No coding experience is necessary.		
Ideas and Tech *For these two slides, you will focus your design and share your specific app ideas. Then you will present the different types of technology and services you'll rely on to make sure your app is a great experience for your users.*	*Presentation Exercise #2*	15 min

SECTION 6: Designing Your App - Emerging Technologies

In this section students learn about emerging technologies like AI, Machine Learning and Augmented Reality are introduced to different AWS technologies. Students have three activities to work through before their group activity where they create a storyboard and add more detail to their app wireframe.	**2 hours 30 minutes**

MODULE	TYPE	TIME
Case Study 3: the Natural History Museums Nature Overheard *Learn about the Natural History Museum's community science project 'Nature Overheard' investigating the link between noise pollution and insect populations using AWS technologies.*	*Video*	5 min
Dancing Robots: An Intro to Inputs and Outputs *Inputs and outputs are a crucial component of artificial intelligence and machine learning. See this concept illustrated with the use of a robot who loves to dance!*	*Activity*	2 min
Artificial Intelligence and Machine Learning *More than just industry buzzwords, the future of technology is fuelled by research into AI and ML. Learn more about these concepts and how they work.*	*Learn*	5 min
Race to the Stars: An AI/ML Knowledge Check *How much do you know about AI and ML? Check what you know with a futuristic game where your reflexes will be tested as well as your brain.*	*Quiz*	3 min
Teamwork Skills: Communicating and Problem Solving *While listening with empathy, it's possible to take what you've learned and use it to map out your course of action. See how empathy maps can be used with design thinking to envision and create great things.*	*Activity*	15 min
AWS GetIT Tech Card Videos *Learn more about different AWS cloud-based services through different videos. See how these services can enhance your own technology ideas.*	*Video*	12 min
Key Concepts in App Design	*Learn*	5 min

Dive deeper into the different types of services that you can use when designing your app.		
Telling A Story Using Data *Collecting data is great, but what can you do with it once you have it? Look at different ways to collect and store information, and figure out how to make sense out of all of it.*	*Learn*	6 min
Using Word Webs *A word web is a technique that you can use with your team to make connections and links to past knowledge. Learn more about how to use this technique to bring your ideas to life!*	*Group Activity #3*	20 min
Augmented Reality: An Introduction *Augmented Reality, or AR, is a technology that you can carry around with you all the time, as long as you have a smartphone. This module will simulate different ways that you might use AR in the real world.*	*Game*	5 min
A Closer Look at Augmented Reality *Now that you know what AR is, see how game makers, retail outlets, and schools do their best to leverage the technology and bring it right to you!*	*Learn*	5 min
Case Study 4: How Nature Overheard Works *The last of our Natural History Museum's case studies, dive a bit deeper to find out how the Nature Overheard project works and how technology plays a large part in the process.*	*Video*	5 min
Mock Up Your App *Now's the time to take your ideas and visualize them using a process called wireframing. You'll see that this process will help others to understand your goals.*	*Group Activity #4*	35 min
Mock Up Your App, Deep Dive *Get deeper into app mock-up using our next-level simulation. Not only will you choose the look, but you will include different functions as well!*	*Design Exercise #2*	15 min
SECTION 7: Finalizing Your App Design		
In this final section's students finalise their wireframe design, looking at and gathering feedback on their idea to revise and test their idea. The last part of the design thinking cycle. At this point, students should focus on getting as much feedback from different user groups as they can and work on their final presentation. (See additional resources for groups to use and present their ideas back to their classes/school/ambassador – 'Ten tips for presenting your app design handout')		**3 hours**
MODULE	**TYPE**	**TIME**
Creating a Minimum Viable Product	*Activity*	30 min

It's important to keep in mind that a minimum viable product (MVP) can still help you to get enough feedback from your users to iterate and improve.		
Wireframing *This is the opportunity to take your wireframe and other visual ideas and bring them into your presentation. Use your prior wireframe experience to enhance this slide in your portfolio!*	*Presentation Exercise #3*	30 min
Mock Up Your App, Using Feedback *In this exercise, you will look at different apps and the feedback they received, and determine the best way to use that feedback to make improvements. Great practice for the real thing!*	*Design Exercise #3*	30 min
Gathering Feedback *It's time to see what others think about your ideas! Getting feedback is an important part of the process, and learning what others recommend will only make you better.,*	*Group Activity #4*	30 min
Revising Your App *On these two slides, you'll have the opportunity to share the feedback you received. You will also share how you incorporated your feedback and the changes you made into your final app design.*	*Presentation Exercise #4*	30 min
Introducing... Your App! *You're just about done! Design your final slide as a pitch to get your target audience interested in your app. Once you're done, you're ready to share your great idea with others.*	*Presentation Exercise #5*	30 min
***Ambassador Touchpoint – Optional**		
Invite your ambassador to review and give feedback on the teams' final app ideas. To help the class decide, consider holding an internal competition (like 'Dragons Den/Shark Tank') to help decide which team's idea is submitted to the competition.		30 min

SECTION 8: The AWS GetIT Journey: Wrap-Up

A final video to congratulate students and celebrate their app designs. Certificates of completion are available.		**5 minutes**
MODULE	**TYPE**	**TIME**
Wrap-up *This module is the very last part of the AWS GetIT Journey. Students won't see it until the very end, when they are done. This video is a reminder that it is time for celebration and achievement.*	*Video*	5 min

SUPPLEMENTAL SECTION: Learn More About Cloud Technology		
This section includes additional modules about cloud technology that students might be interested in learning about like Robotics, Machine Learning and Marketing your ideas.		**1 hour**
MODULE	**TYPE**	**TIME**
Technology Trivia *Test your knowledge and explore the important role of technology in the real world. Even if you don't know the answers, you'll still learn something from the game. Earn bronze, silver, and gold stars along the way for being correct. Can you earn the blue diamond?*	*Game*	3 min
Careers in Tech *Remember being asked, "What do you want to be when you grow up?" Here is your chance to start thinking about the answer to that question. You'll get an introduction to various technological career choices in fields, such as the following: Space, Gaming, Fashion and Health.*	*Learn*	4 min
Robotics in Everyday Life *Robots are all around you, even if you don't think you recognize any. Learn how robots are being used today, and take control of a robot named P.H.I.L. as he tries to complete his warehouse job.*	*Game*	8 min
AI/ML and Self-Driving Vehicles *Movies and books present a future where vehicles drive themselves. In the present, car makers are already adding AI and ML elements to assist drivers. See what they are doing to get closer to the dream of a car that can drive itself.*	*Learn*	5 min
Machine Learning with AWS Deep Racer *AWS DeepRacer gives you an interesting and fun way to get started with machine learning! Learn more about the program through this informational video.*	*Video*	4 min
See the World with Oscar: A Virtual "Virtual Reality" Journey *Our friend Oscar is ready to take you on a virtual journey around the world, simulating how 360VR works. You don't need a headset to enjoy this trip with your furry friend, but you can get an idea as to what can be done with virtual reality.*	*Game*	15 min
Amazon's recommendation algorithms *How does Amazon know what it is that you want to buy? Learn how early systems determined the answer to that question, and how Amazon uses a more personal touch!*	*Learn*	3 min
Recommendation Systems in Everyday Life	*Learn*	7 min

Recommendation systems are everywhere! Examine different situations where you might encounter a recommendation system, and how it benefits you.		
Marketing Your Ideas	*Activity*	15 min

SUPPLEMENTAL SECTION: Additional Resources

These resources are available to download and complete as part of teams' portfolios.		**1 hour 45 minutes**
MODULE	**TYPE**	**TIME**
Presentation Rubric *Rubric that judges will use to evaluate the final competitions*	*Handout*	1 min
A Strong Team with a Bright Mission Worksheet *Worksheet to accompany activity in core content*	*Handout for Group Activity #1*	20 min
Design Your 1st App Worksheet *Worksheet to accompany activity in core content*	*Handout for Group Activity #2*	20 min
Wireframe Your App Worksheet *Worksheet to accompany activity in core content*	*Handout for Group Activity #3*	20 min
Feedback Worksheet	*Handout for Group Activity #4*	20 min
Ten Tips for Presenting Your App Design *To help prepare students for the final competition presentations*	*Handout*	20 min