**Hour of Code: Hopscotch**

**Session Facilitator Preparation**

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| **Platform** | iPad only |
| **Setup Prior to Session** | Hopscotch app will be downloaded onto student iPads prior to the session |
| **Session Facilitator Preparation** | 1. I**nstall Hopcotch app on your iPad** 2. **Visit the Hopscotch website** at <https://www.gethopscotch.com/> for a bit of background about Hopscotch. 3. **Watch the 25-minute Hopcotch: Hour of Code Screencast! video** at <http://www.youtube.com/watch?v=UH5CESyZ7So> As you watch, follow the steps the screencast speaker describes. Pause the video as you add your code in Hopscotch. This is the same video you will show to students during your session.    * Around the 18:45 mark in the video, you will be instructed to tap the Menu button and select New. I think Hopscotch has been updated since the video was published. **To create a new program, you will need to:**      + Tap the **<** in the top left corner      + Tap the **+** in the top right corner   ***Note:*** *The video will essentially facilitate the student session. You will just need to be prepared to pause it after each concept so students can create and execute their code along with the video. You will notice that the screencast speaker moves rather quickly, so it is important that you pause the video for yourself and for the students.* |

**Hour of Code: Hopscotch**

**Student Activity Agenda**

1. **Introduction: What is Computer Science, and What is the Hour of Code?**
   * Please present the introduction below in terms the grade levels you are teaching will best understand.
   * “Today we’re participating in an activity called the Hour of Code. During this hour, you will use a free tool called Hopscotch to learn how to code. Another word for coding is programming. Has anyone heard of the words *coding* or *programming* before? Where did you hear about them?”
   * “When you code, you are writing instructions for what a computer should do. You are in charge, and you tell the computer what to do.”
   * “A computer scientist is someone who writes code in order to solve problems and invent new things. Think about things in your everyday life that use computer science: a cell phone, a microwave, a computer, a traffic light… all of these things needed a computer scientist to help build them.”
   * “Computer science blends human ideas and digital tools to increase our power. Computer scientists work in so many different areas: writing apps for phones, curing diseases, creating animated movies, working on social media, building robots that explore other planets and so much more."
2. **Programming Activity Instructions**
3. Connect your iPad to the projector using the iPad VGA adapter (dongle).
4. **Ask students to work in pairs.** Each pair of students work together on one iPad.
5. **Students open the Hopscotch app on the iPad.**
6. **Show the students the 25-minute Hopcotch: Hour of Code Screencast! video** at <http://www.youtube.com/watch?v=UH5CESyZ7So>
   * Be prepared to pause the video after each concept so students can create and execute their code along with the video.
   * Around the 18:45 mark in the video, you will be instructed to tap the Menu button and select New. I think Hopscotch has been updated since the video was published. **To create a new program, you will need to:**
     + Tap the **<** in the top left corner
     + Tap the **+** in the top right corner

**If students are having difficulty with the task:**

* Tell students, “Ask 3 then me.” Ask 3 classmates, and if they don’t have the answer, then ask the teacher.
* Encourage students and offer positive reinforcement: “You’re doing great, so keep trying.”
* It is okay to respond to respond: “I don’t know. Let’s figure this out together.” If you can’t figure out a problem, use it as a good learning lesson for the class: “Technology doesn’t always work out the way we want. Together, we’re a community of learners.” And: “Learning to program is like learning a new language; you won’t be fluent right away.”

**If student pairs finish a section of the activity early**:

* Ask them to see if their neighbors need any help.

1. **Closing**
   * **Did you have fun today?**
     + Ask students to describe what they enjoyed about the activity and what was challenging.
   * **Would you like to learn more?**
     + “If you enjoyed this activity, you can continue using Hopscotch on your own! Hopscotch is free for the iPad.”
     + “There are also lots of other free tools to help you learn to code. If this tool was challenging for you, you could try a different tool.”
     + Pass out the handout that includes a list of free tools that teach coding/programming concepts.
     + “In Middle School and High School, you can sign up for classes that help you learn more about Computer Science. 7th and 8th graders can sign up for Instructional Technology Applications, and 9th through 12th graders can sign up for Computer Science.”