Session Planning:
90 minutes

Agenda:

1) 11:15-11:35 Intro
2) 11:35-11:55 small group discussion (solo jot, intros, share, post) kara instructions
3) 11:55-12:00 popcorn share out, Aankit instructions for create task
4) 11:55-12:25 create activity
5) 12:25-12:30 etherpad
6) 12:30-12:45 share and close
7) Intro:
    a) Who we are (5 min)
    b) Who are you? (10 min)
    c) 5-minute share (15 min)
        i) What is creative coding vis-a-vie p5.js?

p5 is a project of the Processing foundation, whose mission is to promote software literacy within the visual arts, and visual literacy within technology-related fields — and to make these fields accessible to diverse communities.

p5 lives in the browser: it is a Javascript library, and soon-to-be-released editing environment. It aims to make coding accessible for artists, designers, educators, and beginners. Using the metaphor of a software sketchbook, p5.js has a full set of drawing functionality, and also makes it easy to manipulate text, user input, video, webcam content, and sound in the browser.

[If possible, live code through this]
For example, I can draw geometric shapes, and create variables to make them move.
Or I can have them follow the mouse, and create my own drawing tool (which shows me I could dream up a different Illustrator)

[Go over what I mentioned above, playing with a couple existing examples: text, user input, video, webcam content, and sound]
I can (....),
I can (....)

[Why this is important]
- motivates me to learn about coding —because it allows me to create something I'm excited about

- coding my own creative tools is empowering: it makes me realize that existing apps could be different, and that if I don't like the way they work, I can dream up my own.

It's open source, this is the website, you can contribute.

ii) What is #ethicalCS?

(1) Currently CS ed programs, K-12 and otherwise in the US, have been slow to study the impact of computing and do not provide a frame of understanding to help students navigate the topic. The hashtag, the monthly Twitter edchat, website, and collaboration with teachers is an effort to build a better K-12 CS education program that takes issues of ethics, identity, and social impact seriously. With the hashtag and the monthly Twitter edchats, we are fostering a conversation between experts and CS teachers around topics such as abstraction, design, algorithms, etc. These chats allow to gather resources, build a community, and raise the profile of our project. We take the best parts of the chats and compile them as resources on our website ethicalCS.org, which we hope will be a useful repository of resources and lessons. Finally, in the long-term we need to work with a critical mass of teachers who will experiment, develop lessons, and build a body of knowledge around this topic that all k-12 CS teachers can access. We excited to bring this project to Mozfest because we share your belief in an open and healthy internet and building communities and want your help in furthering the #ethicalCS project.

iii) What is the Blueprint?

8) Small group knowledge share (20 min) - Participants can choose what questions they respond to.
   a) What can you tell us that we don't already know that will enrich our project? What are we all bringing to the table?
      i) For p5: what types of web-based interactive projects that might be interesting to teachers and students
      ii) For ethics: how should incorporate questions and lessons about ethics meaningfully into technology education? What models can help us?
      iii) For Blueprint: Have you used open educational resources? What was good, bad, ugly about them?
   b) What creative computing tools have you tried?
      i) For p5:
         (1) if none, why not?
            (a) Not interested / don't know where to start?

(b) Encountered barriers?
(2) If yes, which? What did you make? What was easy/hard? What potential do you see in its application?

c) How do you think about ethics in your work?
   i) Where and how did you learn to develop a moral and ethical framework to think about your profession?
   ii) How can educational and professional organizations progate domain-specific set of questions, guidelines, etc.
   iii) How do we make these questions, guidelines meaningful to students in the K12 sector?

9) Small group prototype/create (20 min)
   a) *If you have a short amount of time to teach kids from very different backgrounds about creative computing or ethical computing, how might you do it?*
   b) Build a proposal for a creative comp
      i) what is the big idea your project is exploring
      ii) What are students making?
      iii) What resources will be helpful to make it happen?
10) Synthesize:
   a) etherpad (5 min)
   b) Ways to stay connected (5 min)

Application highlights:
1) explore how code can be used for creative and personal expression
2) brainstorm how we might teach student the ethical implications of computing; and
3) provide feedback and contribute to the open source CS4All Blueprint.

Application:
OpenCS: Open-sourcing creative and ethical computing education

What will happen in your session? (max 120 words)
In Fall 2015, New York City launched an ambitious plan to scale computing education to all public school students by 2025. Our proposed session brings together the wider computing education ecosystem including the NYC Department of Education, the Processing Foundation, and the Browning School, a private preparatory school. Together, we seek to engage practitioners and educators in building a new vision for CS education that puts students first. Through three breakout groups participants will 1) explore how code can be used for creative and personal expression; 2) brainstorm how we might teach student the ethical implications of computing; and 3) provide feedback and contribute to the open source CS4All Blueprint.

What is the goal or outcome of your session? (max 120 words)

Over the past few years the CS4All NYC team has observed numerous challenges and opportunities through scaling computing education in the U.S.' largest school system, serving over 1.1 million students. By sharing our lessons learned, gathering feedback on our open-source Blueprint, co-creating new resources, we hope to inspire others to grow creative and ethical computing education in their own communities. We will also facilitate an online community that shares updates, projects, and experiences in the program. This session will thus improve computing education by creating wider global engagement in the movement.

After the festival, how will you and your participants take the learning and activities forward?
After the festival, we will take all of the suggestions and co-created materials and publish them to our website. We also hope to inspire participants to 1) submit open source units to the CS4All Blueprint (http://blueprint.cs4all.nyc/); 2) use open-source resources to continue to learn p5.js (https://processing.org/); and 3) continue to stay engaged through our #ethicalCS Twitter edchat (https://ethicalCS.org/).

How much time you will need?
90 minutes

How will you deal with varying numbers of participants in your session? What if 30 participants attend? What if there are 3?
Since we have three facilitators we can split up into groups depending on the interests and size of the audience. Since there are drafts of many of the materials, participants can dive into content in various ways. For example remixing content and code instead of creating something from scratch can save us time if we have a large audience. We also represent three different organizations, with three different points of view, and can leverage our unique perspectives to meet the needs of the room regardless of audience size.

Would you like to deliver this session bilingually in one of the following languages?
Spanish, Portuguese? Other?

If your session requires additional materials or electronic equipment, please outline your needs.

To me the link is: creative expression drives motivation;
They then learn how technology works, and that they can do it, and determine:
What's considered important, who is allowed to participate,
When the creator is empowered, what should they be considering

Over the past few years we've learned a lot about the challenges and opportunities in scaling computer science education in the U.S.' largest schools system, serving over 1.1 million students, where nearly 70% of students are black or hispanic and over 75% are in poverty.