Texas Workforce Commission, Girl CodeRunner @ UTSA

This handout is also available on this weblink: https://tiny.cc/twc_day1

Introduction to Scratch, getting started
Basics of animations – creating and moving sprites
Challenge: Create an animated greeting card
Challenge: Create a story

Time: 9 AM to 10:15 AM

Task 0: Find group members and create a group name

Welcome to this 5-day coding camp! In this 5-day camp you will learn about: (1) how to make animation for storytelling; (2) how to create and program robots; (3) how to make video games; (4) how to make webpages and showcase your page on the internet so anybody in the world can view your work!; (5) visit the University of Texas at San Antonio to learn about career options in Engineering and Computer Science and experience working in research lab.

PRIZES: All girls who attend at least 4 out of 5 days will win a prize and a certificate. To get the prize and certificate, you will need to be present on the 5th day. You will also get tickets for completing the activities on each of the days. At the end, we will put all tickets in the box (only if you have attended 4 out of 5 days) and draw out two tickets for a grand prize — chromebook (a laptop/tablet). Note that getting more tickets improves your chances of winning the grand prize. Photo from week 1 of girls receiving their prizes and chromebook are here: https://photos.app.goo.gl/v2oqrEjrQzjMh1jq7

Today, which is Day 1, we will learn about how to create animations and stories. First, you need to find team member(s). Depending on the number we have for the camp, the student instructor might have some teams of two girls and some of three. Give your team a name. You will work with the same group members for the rest of the camp.

PRE-CAMP SURVEY: Please take turns on the laptop given to you and fill this pre-camp survey. https://utsaate.co1.qualtrics.com/jfe/form/SV_5ywUicyoQz93LVz

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Have you wondered how animated films created and who creates them? Open internet explore or any other browse and go to "google.com". Now search for "how are animated films created" and "role of an animation engineer". Discuss with your team.
Assignment 0: Call and discuss with the student assistant and also tell her/him about your group name.

Task 1: Introduction to Scratch, getting started

Open Scratch by clicking on the link shown next, .
Now click on the following tutorial link
https://scratch.mit.edu/projects/editor/?tutorial=all and got to "Getting started" tutorial. Now follow the video and reproduce the tutorial.
Assignment 1: Follow the video and show your creation to the student assistant.

Task 2: Basics of animations – creating and moving sprites

First we will go through a number of tutorials and then put the knowledge to practise by doing an example. Use the following hyperlink to get to a tutorials page and then click on the tutorials mentioned below. https://scratch.mit.edu/projects/editor/?tutorial=all

1. "Add a sprite", shows how to choose a sprite (sprite is an animated character)

2. "Add a backdrop" shows how to add a backdrop

3. "Glide Around" shows how to move the sprite

4. "Make it spin" shows how to spin the sprite

5. "Change size" shows how to change the size of the sprite

6. "Hide and Show" shows how to hide and show the sprite

Can you make a single animation that uses atleast 5 of the 6 video tricks mentioned above? For example, if you choose an alien for the sprite you can choose space to be the backdrop. Then you can get the alien to move, spin, change size etc.
Assignment 2: Create your own animation and show it to the student assistant.

Time: 10:30 AM to 11:45 AM

Task 3: Create an animated greeting card

First we will go through two tutorials and then put the knowledge to practise by doing the challenge Use the following hyperlink to get to a tutorials page and then click on the tutorials mentioned below. https://scratch.mit.edu/projects/editor/?tutorial=all

1. "Create animation that talk"

2. "Animate a character"

Your goal is to make an animated greeting card such as a "Birthday card for friend/parent", "Father/Mother's day card", "Thanksgiving/Independence Day card" etc. First talk with your group members. Then decide a theme. Then think of what characters (sprite), backdrop, words, etc you will choose to make it a fun greeting card. Use the journal given to you to document your ideas.

Assignment 3: After you have a clear idea, discuss the idea with the student assistant.

After the student assistant approves the idea, create the animated greeting card. You can then export the greeting card as a video by following this tutorial: https://youtu.be/2_DPlcHHD1c
Assignment 4: Call the student assistant and she/he will upload your greeting card on YouTube using the camp login.
Note for the student assistant: Use the camp YouTube log in given to you. After uploading is complete please tell the team to keep track of the YouTube link, that is, for the YouTube link, https://youtu.be/2_DPlcHHD1c, just keep a track of 2_DPlcHHD1c, as we will need it on the WebDesign day.

Time: 12:15 PM to 1:15 PM

Task 4: Create a story

The final task is to create a story. Click on this link:
https://scratch.mit.edu/projects/editor/?tutorial=all and navigate to "Create a story" and watch the tutorial video. Your goal is to create a short story with animation time less than 60 seconds. Discuss what story you would like to animate. You can also search the internet for a story. For each story consider the amount of details you will have to include to make the story and the need for the necessary animation. Once you have decided the story
Assignment 5: After you have a clear idea, discuss the idea with the student assistant.

Once the story is approved, animate the story using scratch. After you are done, export the story as a video file. See the previous Task for instructions.
Assignment 6: Call the student assistant and she/he will upload your story on YouTube using the camp login.
Note for the student assistant: Use the camp YouTube log in given to you and give the details about the link to the team members for future use.

Time: 1:15 PM to 1:45 PM

Voting

The student assistants will load each of the webpages on the big computer screen and we will vote for the best ones.