Presenters: Adam Day and Nick Raymond

Arduino review – lets brush up on some coding skills

- Arduino Cookbook – chapter 2: Making the sketch do your bidding
- Arduino Cookbook – chapter 6: Getting input from Sensors
- Tutorials 03 for Arduino - https://www.youtube.com/watch?v=abWCy_aOSwY&index=3&list=PLA567CE235D39FA84
- Tutorial 04 for Arduino – https://www.youtube.com/watch?v=js4TK0U848I&index=4&list=PLA567CE235D39FA84

Servo Motors – add motion to your robot (we will be using continuous rotating servos)

- Arduino Cook Book – Chapter 8 on servos (test the code if you have your Arduino kits)
- Adafruit Servo lesson: https://learn.adafruit.com/adafruit-arduino-lesson-14-servo-motors/overview
- Using Servos – video https://www.youtube.com/watch?v=BfMfysmfoNM

Distance Sensors – detect when objects are near/far away

(We will be using a Sharp IR Proximity Sensor for our workshop)

- Types of distance sensors - http://bildr.org/2011/03/various-proximity-sensors-arduino/
- IR Distance Finder explained - https://www.youtube.com/watch?v=Xwr-j-2WT3k

Examples of robots – fun videos and ideas

- 2WD robot – lots of sensors - https://www.youtube.com/watch?v=ShYcvwp2Sn4
- SumoRat 2WD robot - https://vimeo.com/64609146
- Discovery – Omni Directional robot - https://vimeo.com/64268594
- 4wd robot - https://www.youtube.com/watch?v=zdCoQ5W0wE0
Walking spider robot - https://www.youtube.com/watch?v=-vVblGlIMgw
Drawing Robot - https://www.youtube.com/watch?v=bbdQbyff_Sk
Ball collecting robot - https://www.youtube.com/watch?v=iA-In_l54As
Swimming robot - https://www.youtube.com/watch?v=1-iyPHse8uk
Madeline the swimming turtle - https://www.youtube.com/watch?v=l3IlcUklC_s

Add more sensors – add more functionality and capabilities
Alternative distance sensor – Ping Sensor - https://vimeo.com/44836674
IR line following - http://www.engineersgarage.com/contribution/line-follower-robot

IF YOU HAVE TIME TAKE A LOOK AT THE FOLLOWING:

Evaluation Blogs and Articles:
Short articles to get you thinking!
http://www.edutopia.org/blog/capture-learning-crafting-maker-mindset-lisa-yokana
http://www.edutopia.org/blog/creating-authentic-maker-education-rubric-lisa-yokana

Explore:

• Get to know this great resource and bookmark it for later!
  https://www.thetech.org/MakerspaceTheTechBetaSamplerCookbook.pdf
• A favorite book or ours. This site allows you to explore and visit the list of resources from the book.
  http://www.inventtolearn.com/resources/
• Young Makers – a segment of the Maker Education Initiative that you can explore and bookmark for later!
  http://makered.org/youngmakers/

School Library Specific:
http://www.edutopia.org/blog/classroom-makerspaces-transformative-learning-stephanie-west-puckett

FINALLY:

HERE IS THE LINK TO THE WEBINAR: http://icfl.adobeconnect.com/p91gi9j1u2f/. Notes from the webinar are attached.