**Lesson plan (# )**

| **Adopted from:** **Authors: (Dan, Pat, & Jenifer)** | **Grade: 6-8**  | **Lesson duration: 50 min** |
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| **Topic/Title of lesson: I wish I had an app !** |

| [**STANDARD(s) ADDRESSED**](https://www.nj.gov/education/cccs/2020/2020%20NJSLS-CSDT.pdf)*(Include the performance expectation number and text of each standard.)* | **8.1.8.CS.1: Recommend improvements to computing devices in order to improve the ways users****interact with the devices.****• 8.1.8.CS.2: Design a system that combines hardware and software components to process data.****• 8.1.8.CS.3: Justify design decisions and explain potential system trade-offs.****8.1.8.CS.4: Systematically apply troubleshooting strategies to identify and resolve hardware and****software problems in computing systems.** |
| --- | --- |
| **CS PRACTICE(s)** *that students will engage in throughout the lesson.* P [13-15](https://www.nj.gov/education/cccs/2020/2020%20NJSLS-CSDT.pdf) of NJSLS |  |
| **CS CORE IDEA(s) or** **SUB-CONCEPT(s)** *related to the performance expectation(s).* P [20-34,](https://www.nj.gov/education/cccs/2020/2020%20NJSLS-CSDT.pdf) includes core idea and performance expectations which are useful for designing general goals, specific objectives, and learning criteria down below | • The study of human computer interaction can improve the design of devices and extend the abilities of humans. SWBAT create a digital prototype incorporates the user flow for a computational artifact |
| **CENTRAL FOCUS** *(The central focus is an overarching goal of the lesson or big idea for student learning.)* | *research other apps to come up with a goal for a digital prototype* |
| **EU/EQ** (*The enduring understanding(s) and/or essential question(s) that guide the lesson.)**Here are some useful examples from math:* [*https://jaymctighe.com/downloads/Essential-Questions-in-Mathematics.pdf*](https://jaymctighe.com/downloads/Essential-Questions-in-Mathematics.pdf) | **What do you wish you had an application for?**  |
| **PRIOR KNOWLEDGE AND CONCEPTIONS** *(What prior knowledge, skills and/or academic language do these students need to have that will help them be successful with this lesson? Any misconceptions you may anticipate?)* | Prior knowledge is: how to access information. Awareness of Design Cycle |

**UDL/PLANNED SUPPORT**

*(Discuss the universally designed decisions guided by learner diversity and/or individualized adaptations for the variety of learners in your class/group who may require different strategies/support (e.g., children with IEPs or 504 plans, English language learners, children at different points in the developmental continuum, struggling readers, and/or gifted children).*

| **UDL:***How are you universally designing your lesson with all your learners in mind? What other characteristics of diverse learners should be considered?* | **Multiple means of** [**representation**](https://udlguidelines.cast.org/representation) | **Multiple means of** [**action and expression**](https://udlguidelines.cast.org/action-expression) | **Multiple Means of** [**engagement**](https://udlguidelines.cast.org/engagement/?utm_source=castsite&utm_medium=web&utm_campaign=none&utm_content=aboutudl) |
| --- | --- | --- | --- |
|  |  |  |
| **Additional ADAPTATIONS, MODIFICATIONS, and SUPPORTS for individual learners (IEPs, 504s, ELLs)** *If you were not able to meet your focus learners needs through UDL, what individual adaptations will you use to meet your focus learners needs (especially ELLS)* |  |

| **ACADEMIC VOCABULARY/****LANGUAGE (including different coding languages)/****SYNTAX (rules of how to combine symbols to make “correct” statements)**  | *Vocabulary:**Language:**Syntax:* | *Describe the additional supports for each language demand in this lesson. Address both the whole class and individual needs.* |
| --- | --- | --- |
| **LEARNING OBJECTIVES** | **LEARNING CRITERIA** *(How will you know that students have met and/or are moving toward meeting that LO?) Can you identify an existing app and what is its purpose*SWBAT research an app that correlates  | **ASSESSMENT** *(What will be the pre assessment, formative, or summative assessment(s) in this lesson?)**Formative assessment is to explain the use of an app and its intended audience*  |
| **Should include both core ideas and concepts, and practices**  |  | ***pre-assessment:*** ***Can they identify what an app is?******formative:******What is the purpose of the app?******Who is the intended audience?******summative:***  |

**MATERIALS, RESOURCES, and INSTRUCTIONAL TECHNOLOGY**

| **What resources and technology do you need to teach the lesson:** [**http://ai2.appinventor.mit.edu/**](http://ai2.appinventor.mit.edu/)[**https://appinventor.mit.edu/explore/ai-with-mit-app-inventor**](https://appinventor.mit.edu/explore/ai-with-mit-app-inventor) | **What materials, technology will students need? http://ai2.appinventor.mit.edu/** |
| --- | --- |
|  | **Should reflect the UDL planned supports identified above** |

**INSTRUCTIONAL STRATEGIES AND LEARNING ACTIVITIES**

*(Describe explicitly what the teacher and the students will do to meet learning outcomes. Use bulleted or numbered list)*

|  | **What is the teacher doing?** | **What are students doing? (including adaptations)** |
| --- | --- | --- |
| **LAUNCH/****Beginning ( mins)***How will you engage students and capture their interest? 3-7 minutes* |  |  |
| **LEARNING ACTIVITIES/****Middle ( mins)***“I do” “We do” “You do” How will you explain/ demonstrate knowledge /skills required of each objective? How will you ensure that students have multiple opportunities to practice? How will you address the academic language demands?* | **Go over vocabulary term of what an app is, show example apps that are related to what they are used to using****Explain what is necessary in the activity guide for each question** | **Students will then go in and research using different linked websites** **Students will fill in what the app is about,what the target user is, what the need is, how it is accomplishing the needs of the user**  |
| **CLOSURE/****End ( mins)***How will students summarize and state the significance of what they learned? 3-7 minutes* |  |  |
| **Extension/Reinforcement/Homework:**  |
| **Family/Community Engagement—** |

**\* Please attach copies of assessments and/or handouts to be used**