

## Lesson Plan

### Exploring Apps

**Book:** *All About Apps*

**Series:** Cutting-Edge Technology

**Level:** Navigator

### Objective

To help students gain an understanding of current technology by examining how apps have helped other people solve problems and by learning to create an app of their own.

### Supplies

- *All About Apps*
- Whiteboard
- MIT App Inventor website: <http://appinventor.mit.edu/explore/>
- Android phone (optional)

### Before the Activity

Read through the *All About Apps* book, or assign it to students to read on their own.

Then set up a computer to run the MIT APP Inventor. You will need to use or create a Gmail account. To see the app working as you create it, you will also need to set up an Android phone or onscreen simulator to test the app. Click the “Get Started” button on the MIT App Inventor website. Then choose “Setup Instructions.” This will take you to a page explaining how to link your Android phone to the App Inventor or how to create an onscreen simulator on a computer screen.

Once you are done setting up the phone or onscreen simulator, you are ready to create the “TalkTo Me” app. Click the “Tutorials” button on the MIT APP Inventor website, and choose “Beginner Tutorials.” Watch both tutorials about the “TalkToMe” App. You can also read a PDF version of the tutorials by choosing “View Tutorial as Text & Images.” You may want to print these PDFs to refer to as you build this app with students.

## Activity

After reading the *All About Apps* book, ask students the following questions:

1. What is an app? (Answer: a set of instructions that tells a computer or mobile device how to do something)
2. What are some things that apps can do? (Possible answers: share messages, send photos, track school assignments, create slide shows, play music, show maps or directions, run games, turn a device into a tool such as a flashlight or camera, etc.)

Choose a student to read the story of Arjun Kumar (pp. 13–15) out loud to the class. Ask the following questions:

1. What problem was Arjun trying to solve? (Answer: His parents didn't know where his school bus was)
2. How did the app solve this problem? (Answer: It tracked the passengers' location)

Arjun used an online tool called the MIT App Inventor to create his app. Show students the MIT App Inventor website. Explain that you will use this same tool to make an app together as a class. Using the instructions from the “TalkToMe” App tutorials, show students how to create the “TalkToMe” App. After completing the tutorial, take suggestions from the students for what the app should say.

Then ask the following questions:

- What are some ways this app could be used to help people have fun?
- What are some problems this app could solve?
- What could we add to this app or change about it to make it more helpful or more fun?

If students have suggestions for ways to improve the app, try them out as a class.

## Evaluation

Did the students identify the problem and solution in Arjun Kumar's story? Could they answer the questions about the “TalkToMe” App?

## Standards

This lesson may be used to address the Common Core State Standards' reading informational texts standards, grade 4 (RI 4.3) and the National Science Education Standards' Content Standard E, grades K–4.