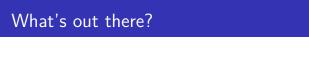# AI Playground

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What's AI?

- Artificial Intelligence- The ability of machine to think and behave like humans.
- How does the machine learn on its own? - That is called Machine Learning. ML is the study of computer algorithms that improve automatically with experience.
- Just like humans learn with experience - Machines also learn with experience!
- Examples of common AI? Alexa, Siri, Google Home, Self Driving Cars, Robots etc.

How do computers make decisions?

- Conditional statements are used to perform different actions based on different conditions.
- In many programming languages, decisions (also called conditionals) take the form of an if-then construct. They start with a condition, which is then evaluated as either True or False.

How do computers make decisions?

Flow chart

Let's Build that

```
Bot.send("Are you going out to play?")
async function respond(inputText){
    if (inputText == "yes"){
        Bot.send("Wear a hat");
    }
    else {
        Bot.send("ok");
    }

}
```

What we learned. - Bot.send() method - if else statements.

Build a basic greetings bot

Flow chart

Build a basic greetings bot

```
Bot.send("Whats the time right now?");
async function respond(inputText){
    if (inputText<12){
        Bot.send("Good morning!");
    }
    else if(inputText<17){
        Bot.send("Good afternoon!");
    }
    else{
        Bot.send("Good Night!");
    }
 }
```

Benefits of AI Playground

- Streamlines a lot of back end operations, so that the you can just learn what AI is — and can get immediate results!
- User friendly!
- Designed to suit students needs.
- Students can see and publish new projects and thus learn from each other.

How does learning AI help?

- Logical reasoning and Sequencing
- Critical thinking
- Problem solving
- Mental Mathematics
  - The above skills are implicit skills that students learn along with AI. And this helps them in academics, life, etc.

The well known Pythagorean theorem $x^2 + y^2 = z^2$ was proved to be invalid for other exponents. Meaning the next equation has no integer solutions:

$$x^n + y^n = z^n$$

can AI ? find near misses for this equation?