

2a.

The programming language used for this program is Java Script. The purpose of this program is to educate people on foreign languages in a fun and engaging way. The video illustrates one of the key elements in learning any new language: repetition. When the game/quiz begins, the user is asked a series of questions, and must select the correct response. The difficult part is that all of the answers are in four languages (not English): Spanish, French, Japanese, and German. If the user clicks the correct response, then he/she moves on to the next question. However, if you select the incorrect answer, then it will restart, and the user must start again from the first question.

2b.

The main goal of the app I created is to have people learn new words in different languages. The quiz works as follows: If the correct answer is clicked, then the next question appears; if the wrong one is clicked, then the quiz restarts. The main structure of the app is a series of onEvent functions to lead you from one question to the next; this series of repeated onEvent functions exemplifies repetition, a key element in learning a new language. To make the app more interactive, I decided to add in user input on three of the twelve questions. I had trouble with having the user input box cleared after the check button is clicked. I kept running the app, but came back to the same problem. It was after a couple times that I realized that I needed to add in a setText function to clear the input box every time the check button is clicked. This app was entirely an independent project, with no outside collaboration.

2c.

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```
onEvent("3Btn", "click", function(event) {  
  ans3 = getText("input3");  
  if (ans3 == "horse") {  
    setScreen("Q3#");  
    setText("Ans3", ans3 );  
    setText("input3", "");  
  } else {  
    setScreen("gameOver");  
    setText("input3", "");  
  }  
}
```

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The two algorithms within the selected algorithm are the onEvent function (to move on to the next screen) and the if... else.... statement. This algorithm is used when the user must type in a response. The first algorithm allows for the check button to be clicked and either move on to the next screen which shows the correct answer and allows the user to continue the quiz, or go to the game over screen when the user has to restart. The second algorithm uses logical concepts and allows for the user's input to be checked and verified by using an if/else statement. There is only one correct answer, in this case it is horse. If the user types in horse exactly then they got it right and they move on; anything other than horse will be counted as wrong and the user will have to restart. Another small part of the algorithm is that everytime the check button is clicked, the input text box is reset to be blank for the next time around. The two algorithms together make the program run smoothly as it is supposed to.

2d.

```
//  
//  
//if wrong answer is clicked -- leads back to the beginning  
onEvent("oops", "click", function(event) {  
  setScreen("Q1");  
});  
//  
//
```

The purpose of my program is to educate and encourage people to learn foreign languages. To do that, my game/quiz asks questions, and the user must select one of four answers, one is in Spanish, one is in French, one is in Japanese, and one is in German. Because repetition is key for learning a new language, I decided to incorporate it into my program. Except for three questions where the user types in a response, the rest are multiple choice questions. For each question, there is only one correct answer, so when any one of the incorrect answers is clicked, the game over screen comes up. On that screen the user then clicks on a button to try again. The trick of the game is that every time an incorrect answer is clicked, it brings you back to the first question. This program code segment allows the game to work as a constant loop, always waiting for the game over screen to appear.