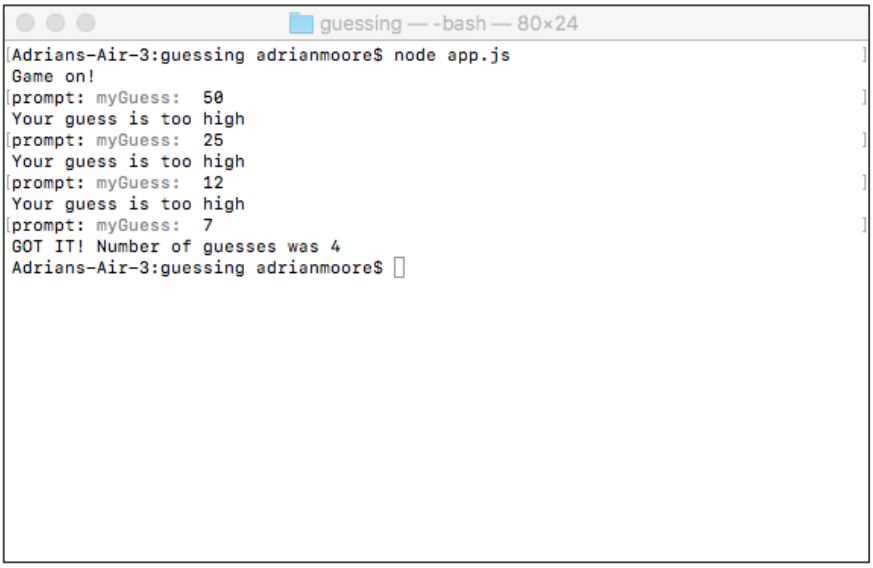
COM644 Full Stack Web and App Development

Week 1 Challenge

Aim: Create a Node.js project using npm, install an external library and implement a simple guessing game.

Description:

Guesser is a simple game by which the *Guess Master* (played by the computer) chooses a random integer between 1 and 100 and the *player* (the user) tries to guess the number in as few attempts as possible. After each guess, the *Guess Master* responds by stating whether the player's guess was too high or too low. The game continues until the player guesses the correct number and the Guess Master confirms that the guess is correct and confirms how many guesses were required. A sample output script from the game is shown below.



Architecture:

The application should be organised as two main code files as follows:

- **guesser.js** will contain two functions that are exposed to the main application – one to start a new game and chose the random number, and another to process a user's guess passed as a parameter and produce an appropriate console message. This file

should also contain whatever local variables and local functions that are required to support this activity.

- **app.js** will require the functions exposed by **guesser.js** and will implement the main game logic – requesting a value from the user, checking it using the function exposed by **guesser.js** and continuing until the user has guessed correctly.

Hints:

- Create the application using **npm** so that you can easily install a helper package

- There is a helper package called **prompt** that can be used to obtain console input from the user. Details of the **prompt** package can be seen at https://www.npmjs.com/package/prompt. The package can be installed to your application by **`npm install prompt --save`**.

- The **`prompt.get()`** method takes the activity to be performed after the prompt is received as a callback function. You will need to come up with a code architecture that makes this behave as a blocking function – i.e. execution of the program cannot continue until the user has provided a value.