

Overview

The goal of this challenge is to assess your ability to program, ability to follow instructions, and ability to build a usable product. At Growbot, we try hard to build simple products that are fun to use. This challenge is aimed at testing you to do the same.

Important Characteristics

Please keep these characteristics in mind while you're building.

Simplicity

The simpler things are, the easier they are to understand. This applies to product and code.

Code Organization

Having to search through a disorganized code-base can eat up lots of time.

Clarity

This has a lot to do with naming but can also apply to logic within a method. It's helpful when an API is clearly defined.

Ease of use (Intuitive)

It's 2016, software shouldn't be hard to use. Interacting with users through a text interface adds a new dimension of complexity.

Setup Instructions

1. Setup a Slack account.
2. Add a bot DIY integration for your bot
 - a. https://YOUR_DOMAIN.slack.com/apps/manage/custom-integrations
 - b. Click "Bots"
 - c. Click "Add Configuration"
3. Enter the details of your bot (name, etc...)
4. Slack gives you an API Token to establish your bot connection.

NOTE: Buttons are not available w/ DIY Bots. Setting up buttons is a bit tedious so I avoided using them for this.

The Bot - Connect 4 Bot

Overview

You'll be building a Connect 4 bot that supports head to head play **between two users**. A Slack user can start a game by sending a start command directly to the bot which will start the game between two people. It'd be cool to advertise the results of a game to #general so the rest of the team can follow along but this isn't necessary.

For Connect 4 Rules, check out <http://www.wikihow.com/Play-Connect-4>.

Instructions

1. Add a bot user to a Slack account (detailed above).
2. Add a public github repo.
3. Build your bot (any language/platform you prefer).
 - a. Any language accepted as long as we can run it locally.
 - b. Use the RTM API to connect your bot to the Slack account.
4. Add a Readme w/ instructions on how to run your bot.
 - a. Again, we must be able to run it locally.
5. Send the github link to joseph@growbot.io

Game Interaction

NOTE: @connect4 is a reference to your bot.

Sequence

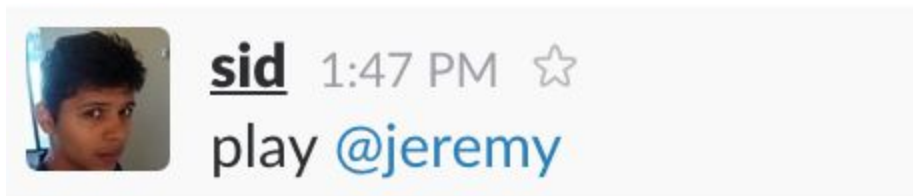
1. @alice sends "play @bob" to @connect4 in a DM.
2. @connect4 starts a new game between @alice and @bob. @connect4 sends the blank board state to @alice asking for the next move.
3. @alice responds w/ 1, 2, 3, 4, 5, 6, or 7 to select a column.
4. @connect4 sends the new board state to @bob asking for the next move.
5. @bob responds w/ 1, 2, 3, 4, 5, 6, or 7 to select a column.
6. @connect4 sends the new board state to @alice asking for the next move.
7. Repeat this until someone wins or there's a draw.

Example

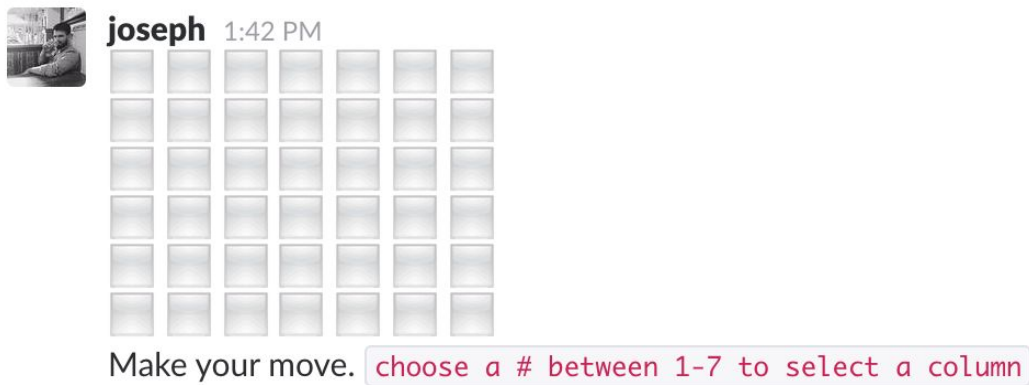
NOTE: These are just an example, you're free to use these or go a different route.

NOTE: Let's pretend "joseph" is the bot.

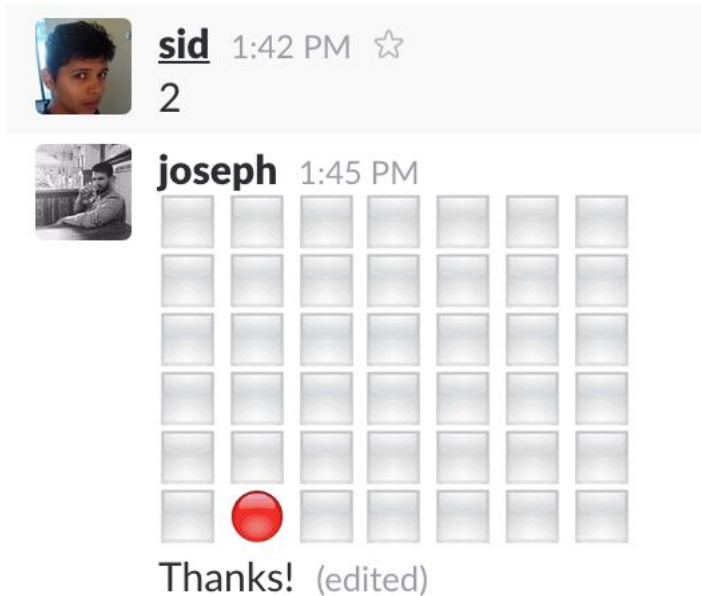
1. Starting a game



2. @connect4 starts the game asking @sid for his move.



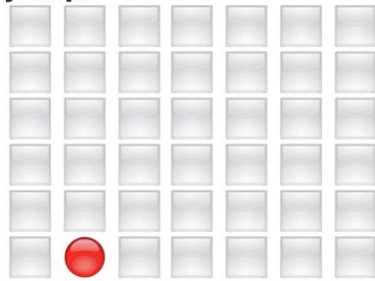
3. @sid responds with his move and @connect4 confirms.



4. @connect4 asks @jeremy for his move, and the same thing happens.



joseph 1:43 PM



Make your move. Choose a number between 1-7 to select a column.

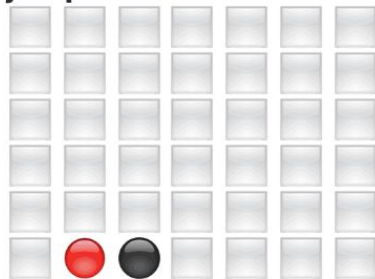


jeremy 1:44 PM

3



joseph 1:44 PM



Great move!