

# Implement a Slack App

This documentation describes the steps to implement a dialog-submission-approval slack app

Source code: <https://glitch.com/edit/#!/sand-ozraraptor?path=src/index.js:240:48>

## Get started

1. First read the linked blueprint to have a general idea what we're going to do

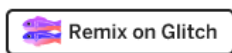
<https://glitch.com/~slack-slash-command-and-dialogs-blueprint>

2. Click the "Remix on Glitch" button in the blueprint and you'll get a unique glitch url which will be used to implement your app



## Setup

### 1. Remix this Glitch repo



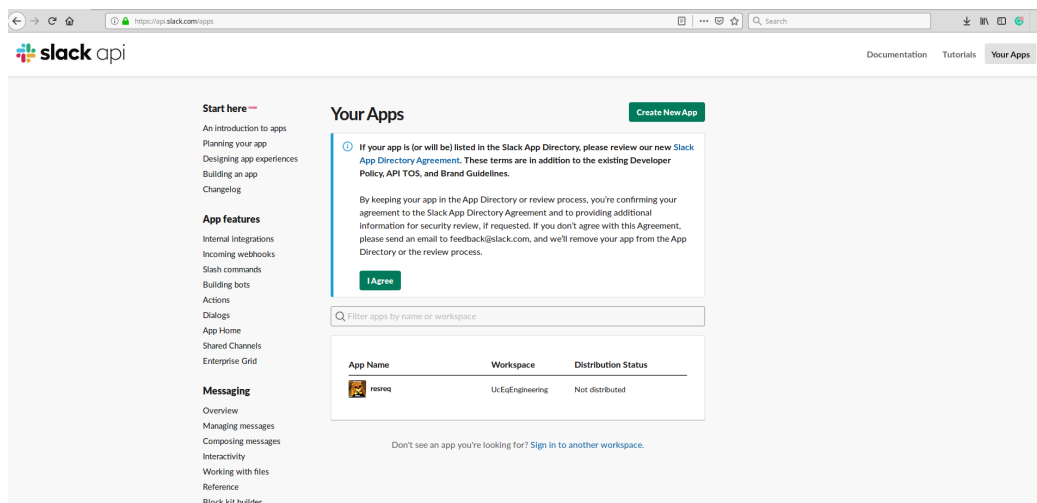
### 2. Create a Slack app

1. Create an app at <https://api.slack.com/apps>
2. Add a Slash command (See *Add a Slash Command* section below)

## Create a slack app

1. First create a slack app following this page <https://api.slack.com/slack-apps>

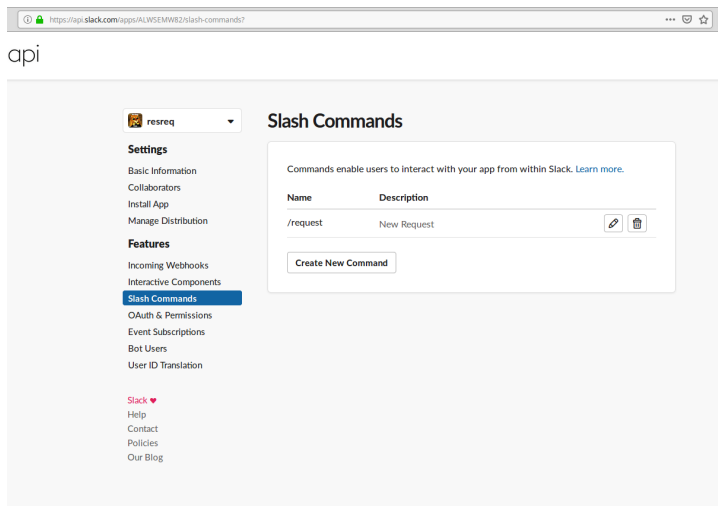
In this case, we created a 'request' app to handle core hours request



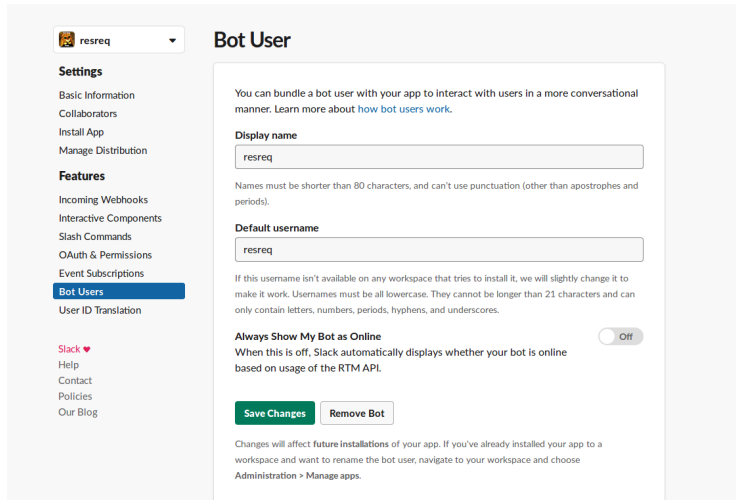
2. Add a Slash command for your app

1. Go back to the app settings and click on Slash Commands.
2. Click the 'Create New Command' button and fill in the following:
  - Command: /request
  - Request URL: Your server or Glitch URL + /command
  - Short description: Create a core hour request ticket

- Usage hint: [the problem you're having]
- If you did "Remix" on Glitch, it auto-generate a new URL with two random words, so your Request URL should be like: <https://fancy-feast.glitch.me/command>.

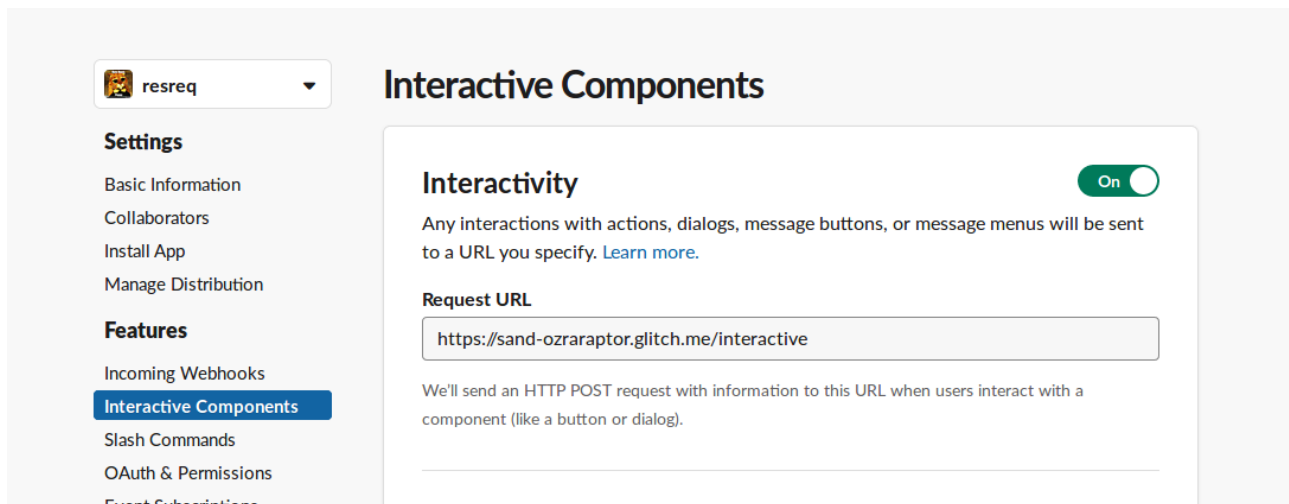


3. Navigate to **Bot Users** and click "Add a Bot User" to create one.



4. Enable Interactive components

1. Go back to the app settings and click on Interactive Components.
2. Set the Request URL to your server or Glitch URL + /interactive.
3. Save the change.



5. On glitch, inside ticket.js, modify the 'sendConfirmation' function to create a custom dialog

```

1  const axios = require('axios');
2  const axios = require('axios');
3  const axios = require('axios');
4  const axios = require('axios');
5
6  // Send ticket creation confirmation via
7  // chat.postMessage to the user who created it
8
9  const sendConfirmation = (ticket) => {
10   const timestamp = Math.round(new Date().getTime() / 1000);
11   const token = new Date().toISOString();
12
13   axios.post('https://slack.com/api/chat.postMessage', {
14     token: process.env.SLACK_ACCESS_TOKEN,
15     //channel: ticket.channel,
16     //channel: 'C00000000000',
17     channel: 'C00000000000',
18     text: 'Ticket created',
19     attachments: [
20       {
21         title: 'Ticket created by @' + ticket.createdBy,
22         // Get data from the 3rd party Notion system
23         title_link: '',
24         color: '#2e8b57',
25         text: ticket.text,
26         fields: [
27           {
28             title: 'Title',
29             value: ticket.project.title,
30             short: true,
31           },
32           {
33             title: 'Submitted',
34             value: token,
35             short: true,
36           },
37           {
38             title: 'Computational Details',
39             value: ticket.comp.details || 'None',
40           },
41           {
42             title: 'Estimated',
43             value: ticket.estimated,
44           },
45         ],
46       },
47     ],
48   });
49 }

```

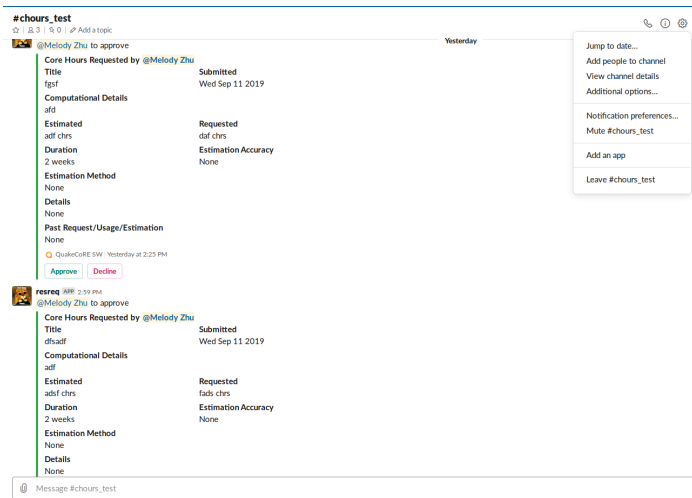
## Run this App

1. Set Environment Variables on glitch

1. Set the following environment variables to .env (see .env.sample):

- SLACK\_ACCESS\_TOKEN: Your bot token, xoxb- (available on the **OAuth & Permissions** once you install the app)
- SLACK\_SIGNING\_SECRET: Your app's Signing Secret (available on the **Basic Information** page)

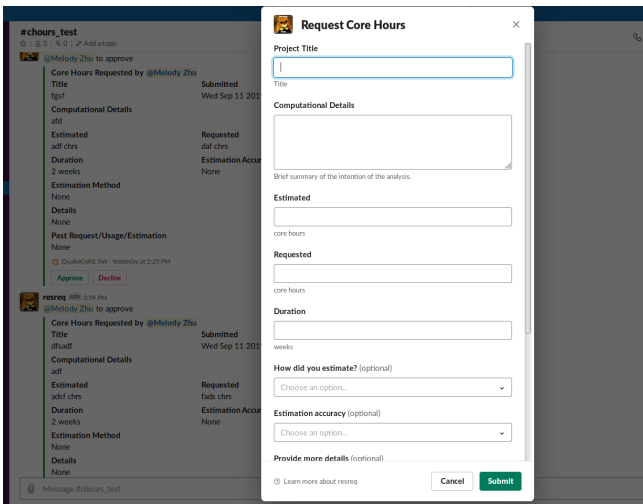
2. Add the app to your channel: Click the 'channel settings' wheel icon and select 'add an app'



3. type '/request in the message and press 'Enter' twice

Fill the textboxes and submit

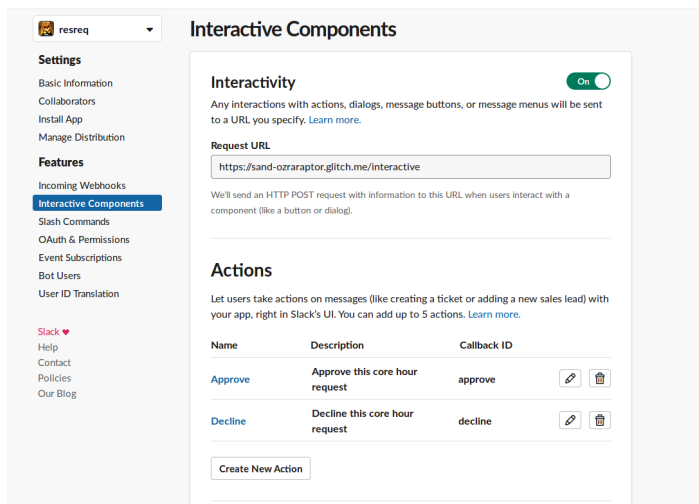
The dialog will then be submitted to the channel



## Enable actions to the submitted dialog

Now the core hour request has been submitted, we need to enable approve/decline actions

1. First read this documentation <https://api.slack.com/actions>
2. Create new actions to your dialog follow the link above and **save changes**



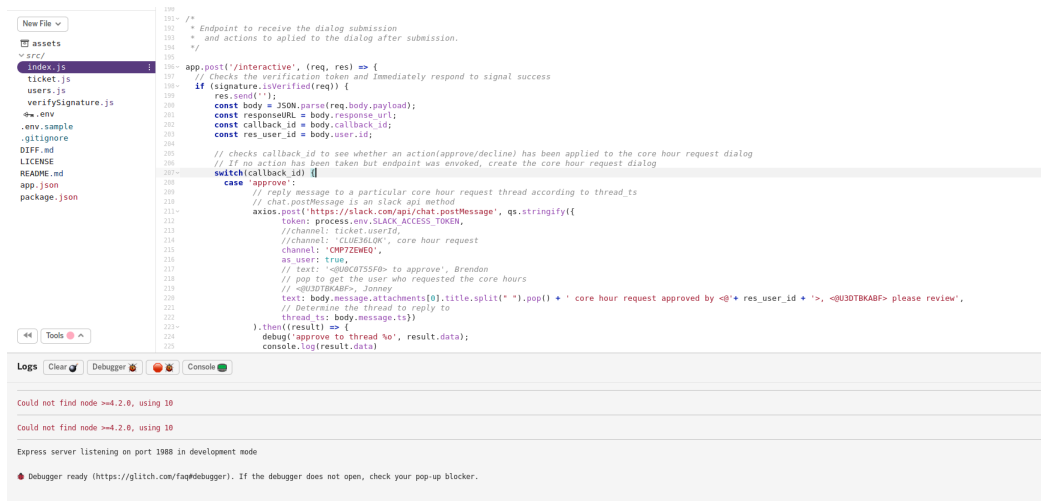
3. On glitch, inside index.js, modify the function related to evocation of endpoint '/interactive'

The key is to check callback\_id and see what action has been taken

Use the debug tools at bottom left to see request body content.

Note: 1. As we want to automatically post a message upon the action to a **thread** instead of in the channel, use slack api method **chat.postMessage** and set **thread\_ts** attribute to the request message's **message\_ts** attribute (body.message.ts)

2. If we want to post message in the channel. use the **sendMessageToSlackResponseURL**, set the response url to the request message's **response\_url** (body.response\_url) and set **response\_type** to **'in\_channel'** so that the message is not only visible to you.



4. When first using new actions:

4a. Click the '3 dot' button at top right of a request message and

4b. Click 'more message actions...', then

4c. Click 'Approve'

Repeat 4a & 4b for 'Decline' Action

Next time you click the '3 dot' button, you will see 'Approve' and 'Decline' already in the dropdown menu

The screenshot shows a Slack workspace with a message from @Melody Zhu to approve Core Hours Requested by @Melody Zhu. The message is highlighted in blue. Below the message, there are four action buttons: 'Approve', 'Decline', 'Add reaction', and 'Reply to thread'. The 'Approve' button is selected. The interface also shows a sidebar with a list of channels and a top bar with search and notification icons.

**#hours\_test**

👤 | 📁 | 🔍 Add a topic

---

**adf**      Wed Sep 11 2019      Today

<b>Computational Details</b>	
adf	
<b>Estimated</b>	<b>Requested</b>
dafs chrs	dafd chrs
<b>Duration</b>	<b>Estimation Accuracy</b>
2 weeks	None
<b>Estimation Method</b>	
None	
<b>Details</b>	
None	
<b>Past Request/Usage/Estimation</b>	
None	

🔗 QuakeC@RE SW · Today at 10:20 AM

💬 2 replies Last reply today at 10:20 AM

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**resreq** ⚙️ · 10:26 AM  
 @Melody Zhu to approve

<b>Core Hours Requested by @Melody Zhu</b>	
Title	Submitted
dafs	Wed Sep 11 2019
<b>Computational Details</b>	
dafd	
<b>Estimated</b>	<b>Requested</b>
adcf chrs	dia chrs
<b>Duration</b>	<b>Estimation Accuracy</b>
2 weeks	None
<b>Estimation Method</b>	
None	
<b>Details</b>	
None	
<b>Past Request/Usage/Estimation</b>	
None	

🔗 QuakeC@RE SW · Today at 10:26 AM

### Thread

# hours\_test

---

**resreq** ⚙️ · Today at 10:26 AM  
 @Melody Zhu to approve

<b>Core Hours Requested by @Melody Zhu</b>	
Title	Submitted
dafs	Wed Sep 11 2019
<b>Computational Details</b>	
dafd	
<b>Estimated</b>	<b>Requested</b>
adcf chrs	dia chrs
<b>Duration</b>	<b>Estimation Accuracy</b>
2 weeks	None
<b>Estimation Method</b>	
None	
<b>Details</b>	
None	
<b>Past Request/Usage/Estimation</b>	
None	

🔗 QuakeC@RE SW · Today at 10:26 AM

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5 replies

**resreq** ⚙️ · 3 hours ago  
 @Melody Zhu core hour request approved by @Melody Zhu,  
 @jonneyhuang please review

**resreq** ⚙️ · 3 hours ago  
 @Melody Zhu core hour request approved by @Melody Zhu,  
 @jonney.huang please review

**resreq** ⚙️ · 3 hours ago  
 @Melody Zhu core hour request declined by @Melody Zhu,  
 @jonney.huang please review

**resreq** ⚙️ · 3 hours ago  
 @Melody Zhu core hour request approved by @Melody Zhu,  
 @jonney.huang please review

**resreq** ⚙️ · 3 hours ago