# **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

arix on Glitch 😹

#### 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

← → ⊂ ŵ 0	https://api slack.com/apps			F	© ✿ Q Search	]	Ŧ	lin 🗊 🥳
<b>‡ slack</b> ap	pi					Documentation	Tutorials	Your Apps
	Start here *** An introduction to apps	Your Apps		Create New App				
	Planning your app Designing app experiences Building an app Changelog		ment. These terms are in additi	ctory, please review our new Slack on to the existing Developer				
	App features	agreement to the Slav Information for secur please send an email	to feedback@slack.com, and we					
	Incoming webbooks Slash commands Building bots Actions	Directory or the revie	w process.					
	Dialogs App Home	Q Filter apps by name or w						
	Shared Channels Enterprise Grid	App Name	Workspace	Distribution Status				
	Messaging Overview	resreq	UcEqEngineering	Not distributed				
	Managing messages Composing messages Interactivity Working with files	Don't see an	app you're looking for? Sign in t	o another workspace.				
	Reference Block kit builder							

- 2. Add a Slash command for your app
  - 1. Go back to the app settings and click on Slash Commands.
  - 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.

🛈 🔒 https://api.	slack.com/apps/ALWSEMW82/slash-commands?		◙ ☆
api			
	🔀 resreg 🔹	Slash Commands	
	resreq 👻	Slash Commands	
	Settings		
	Basic Information	Commands enable users to interact with your app from within Slack. Learn more.	
	Collaborators		
	Install App	Name Description	
	Manage Distribution	/request New Request	
	Features		
	Incoming Webhooks	Create New Command	
	Interactive Components		
	Slash Commands		
	OAuth & Permissions		
	Event Subscriptions		
	Bot Users		
	User ID Translation		
	Slack 🖤		
	Help		
	Contact		
	Policies		
	Our Blog		

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

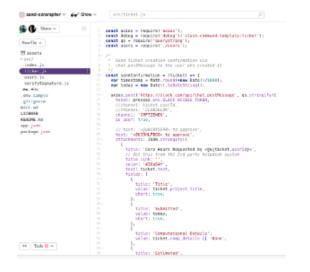
Settings	
Basic Information	You can bundle a bot user with your app to interact with users in a more conversational
Collaborators	manner. Learn more about how bot users work.
Install App	Display name
Manage Distribution	resreq
Features	
Incoming Webhooks	Names must be shorter than 80 characters, and can't use punctuation (other than apostrophes and periods).
Interactive Components	
Slash Commands	Default username
OAuth & Permissions	resreq
Event Subscriptions	If this username isn't available on any workspace that tries to install it, we will slightly change it to
Bot Users	make it work. Usernames must be all lowercase. They cannot be longer than 21 characters and can
User ID Translation	only contain letters, numbers, periods, hyphens, and underscores.
	Always Show My Bot as Online
Slack 🎔	When this is off, Slack automatically displays whether your bot is online
Help	based on usage of the RTM API.
Contact	
Policies	
Our Blog	Save Changes Remove Bot
	Changes will affect future installations of your app. If you've already installed your app to a
	workspace and want to rename the bot user, navigate to your workspace and choose

4.Enable Interactive components

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

Settings	
Basic Information	Interactivity
Collaborators	Any interactions with actions, dialogs, message buttons, or message menus will be sent
nstall App	to a URL you specify. Learn more.
lanage Distribution	Request URL
eatures	https://sand-ozraraptor.glitch.me/interactive
ncoming Webhooks	
nteractive Components	We'll send an HTTP POST request with information to this URL when users interact with a component (like a button or dialog).
ash Commands	component (like a button or dialog).

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



## 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'

ours_test 2.3   № 0   Ø Add a topic			S (
@Melody Zhu to approve		Yesterday	Jump to date
Core Hours Requested by @M	delody Zhu		Add people to channel
Title	Submitted		View channel details
fgsf	Wed Sep 11 2019		Additional options
Computational Details			Additional options
afd			Notification preference
Estimated	Requested		Mute #chours test
adf chrs	daf chrs		Mute #chours_test
Duration	Estimation Accuracy		Add an app
2 weeks	None		your an app
Estimation Method			Leave #chours_test
None			
Details			
None			
Past Request/Usage/Estimati	on		
None			
Q QuakeCoRE SW   Yesterday at 2:25	5 PM		
Approve Decline			
resreq APP 2:39 PM			
@Melody Zhu to approve			
Core Hours Requested by @M			
Title	Submitted		
dfsadf	Wed Sep 11 2019		
Computational Details			
adf			
Estimated	Requested		
adsf chrs	fads chrs		
Duration	Estimation Accuracy		
2 weeks	None		
Estimation Method			
None			

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

Fill the textboxes and submit

The dialog will then be submitted to the channel

	<b>irs_test</b> 8   % 0   Ø Addatopic		Request Core Hours	×	e e
124	@Melody Zhu to approve		Project Title	_	
	Core Hours Requested by @Melody Zhu		1		
	Title	Submitted	Title	- 1	
	fgsf	Wed Sep 11 201			
	Computational Details afd		Computational Details	-	
	Estimated	Requested			
	adf chrs	daf chrs			
	Duration	Estimation Accur			
	2 weeks	None	Brief summary of the intention of the analysis.		
	Estimation Method				
	None		Estimated		
	Details				
	None		core hours	- 1	
	Past Request/Usage/Estimation None		core nours Requested		
	Q QuakeCoRE SW   Yesterday at 2:25 PM		Requested		
	Approve Decline				
			core hours	_	
	esreq APP 2.59 PM @Melody Zhu to approve				
			Duration		
	Core Hours Requested by @Melody Zhu Title	Submitted			
	dfsadf	Wed Sep 11 201	weeks		
	Computational Details	1100 000 11 101			
	adf		How did you estimate? (optional)		
	Estimated	Requested	Choose an option	-	
	adsf chrs	fads chrs			
	Duration	Estimation Accur	Estimation accuracy (optional)		
	2 weeks	None		- I	
	Estimation Method		Choose an option	·	
	None		Provide more details (optional)		
	Details		Provice more decails (conoria)	_	
0	Vessage #chours_test		Learn more about resreq     Cancel     Sut	mit	

## 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

Settings				
Basic Information	Interactiv	ity		On
Collaborators	Any interaction	s with actions, dialogs, message bu	ttons, or message me	nus will be sent
nstall App	to a URL you sp	pecify. Learn more.	_	
Manage Distribution	Request URL			
eatures	https://sand-o	ozraraptor.glitch.me/interactive		
ncoming Webhooks				
nteractive Components		TP POST request with information to th a button or dialog).	is URL when users intera	ict with a
Slash Commands	component (like a	for dalog.		
OAuth & Permissions				
vent Subscriptions				
Bot Users	Actions			
		ctions on messages (like creating a	ticket or adding a nev	v sales lead) with
Bot Users User ID Translation	Let users take a	ctions on messages (like creating a in Slack's UI. You can add up to 5 a		v sales lead) witl
ser ID Translation	Let users take a your app, right	in Slack's UI. You can add up to 5 a	ctions. Learn more.	v sales lead) witl
ser ID Translation ack ♥ elp	Let users take a			v sales lead) with
ser ID Translation ack ♥ elp ontact	Let users take a your app, right Name	in Slack's UI. You can add up to 5 a	Callback ID	
ser ID Translation	Let users take a your app, right	in Slack's UI. You can add up to 5 ar Description	ctions. Learn more.	
ter ID Translation ack ♥ ap intact licles	Let users take a your app, right Name	in Slack's UI. You can add up to 5 ar Description Approve this core hour	Callback ID	v sales lead) with
ter ID Translation ack ♥ ap intact licles	Let users take a your app, right Name Approve	in Slack's UI. You can add up to 5 ar Description Approve this core hour request Decline this core hour	Callback ID approve	

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 reponse\_url (body.response\_url) and set response\_type to 'in\_channel' so that the message is not only visible to you.

New File ~	<pre>imp // * Endpoint to receive the dialog submission  * Endpoint to receive the dialog after submission.  * and actions to aplied to the dialog after submission.  * * * * * * * * * * * * * * * * * * *</pre>
README . md	207 switch(callbackid) d
app.ison	208 case 'approve':
package, ison	200 // reply message to a particular core hour request thread according to thread_ts
	218 // chat.postWessage is an slack api method 211- axios.post("https://slack.com/api/chat.postWessage', gs.stringify[]
	axis:post("https://stack.com/api/chat.postNessage", ds.stringity({ 112 token: process.env.SLACK ACCESS TOKEN.
	213 //channel: ticket.userId,
	214 //channel: 'CLUE36LQK', core hour request
	225 channel: 'CMP7ZENEO', 226 as user: true
	210 as_user: true, 217 // text: 'cydwCdT555F0> to approve', Brendon
	218 // pop to get the user who requested the core hours
	219 // <@UJDTBKABF>, Jonney
	<pre>228 text: body.message.attachments[0].title.split(* ").pop() + ' core hour request approved by &lt;@'+ res_user_id + '&gt;, &lt;@U3DTBKABF&gt; please review', 221 // Determine the thread to reply to</pre>
	222 thread is: body.message.ts)
	223~ ).then((result) => {
44 Tools 😑 🔨	224 debug('approve to thread %o', result.data);
	225 console.log(result.data)
Logs Clear 🍯 Debugger 🐞	Console
Could not find node >=4.2.0, usi	ng 10
Could not find node >=4.2.0, usi	ng 10
Express server listening on port	1968 in development mode
Debugger ready (https://glitcl	s.com/fag#debugger). If the debugger does not open, check your pop-up blocker.
<ul> <li>beougger ready (https://gtittl</li> </ul>	scontranteneouggers, at the neougger unes not open, control pop-up utocher.

4. When first using new actions:

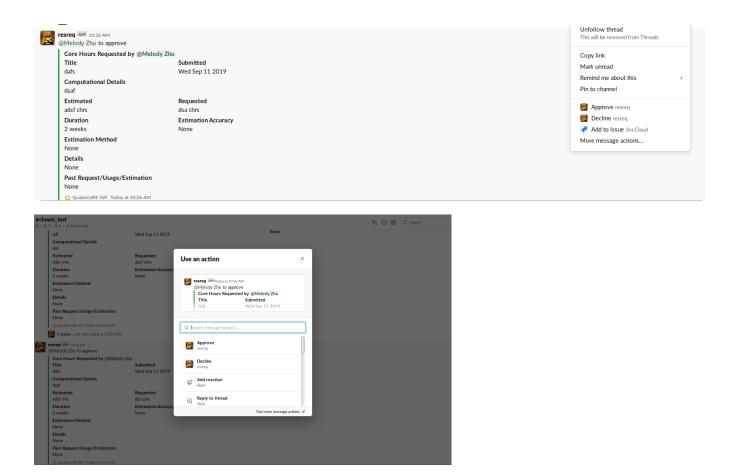
4a. Click the '3 dot' button at top right of a request message and

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



5. To approve/Decline a core hour request, Click '3 dot' button, click 'Approve' or 'Decline', then an approve/decline message will be sent to the core hour request thread

