Bot Chat:
Creating your first Slack bot

Brice McIver
Keyhole Software
August 4, 2017

Outline

- Background
- Setup
- Post messages (incoming webhooks)
- Event Subscriptions
- Slack Developer Kit for Node.js
- Easier solutions :-)

Background

- Launched in August 2013
- Started as an internal tool for collaboration
- Original backend was an IRC server

Success

- Over 3 million users each work day

- Reached $1 billion valuation in 15 months

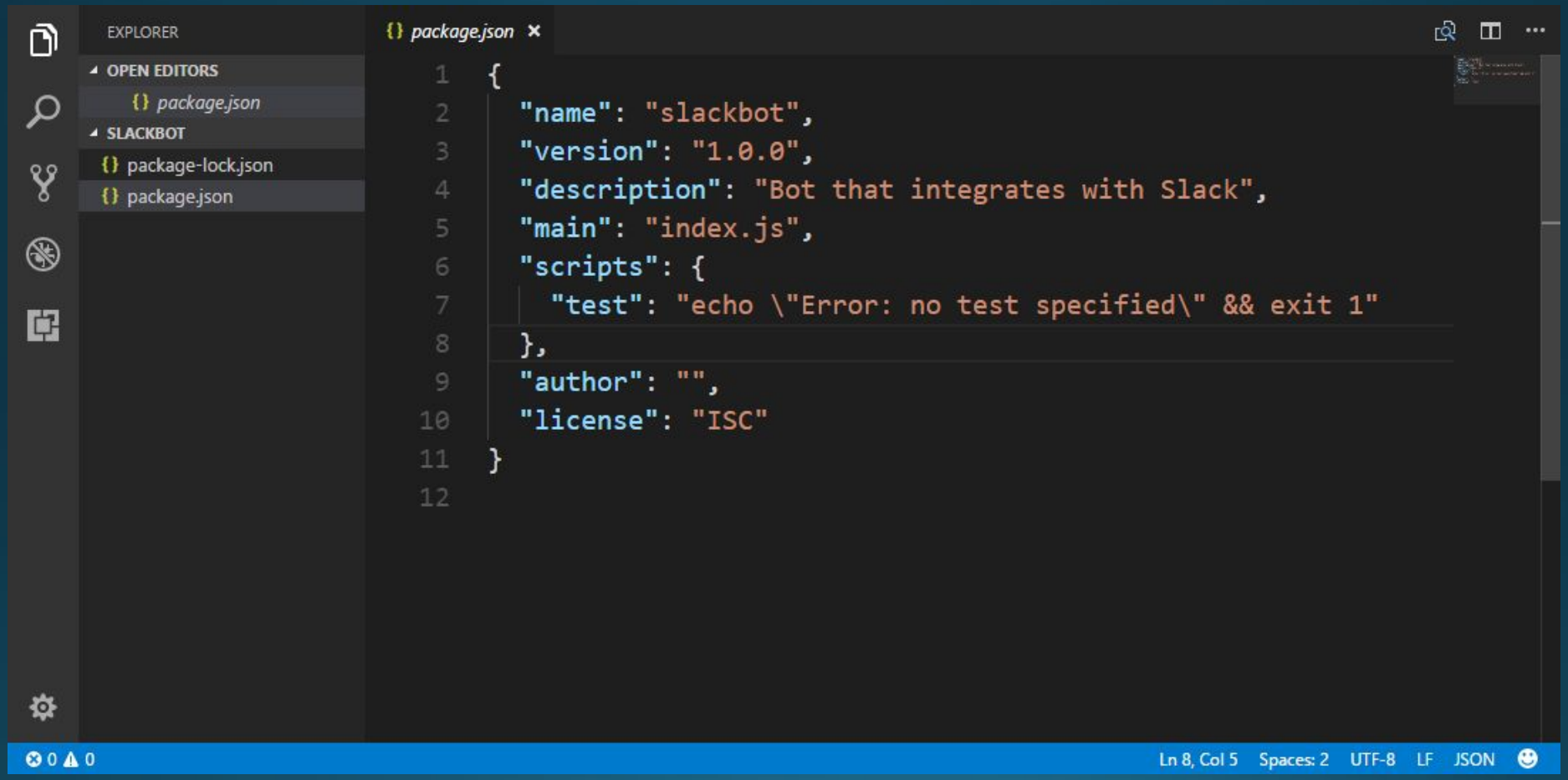
Prerequisites

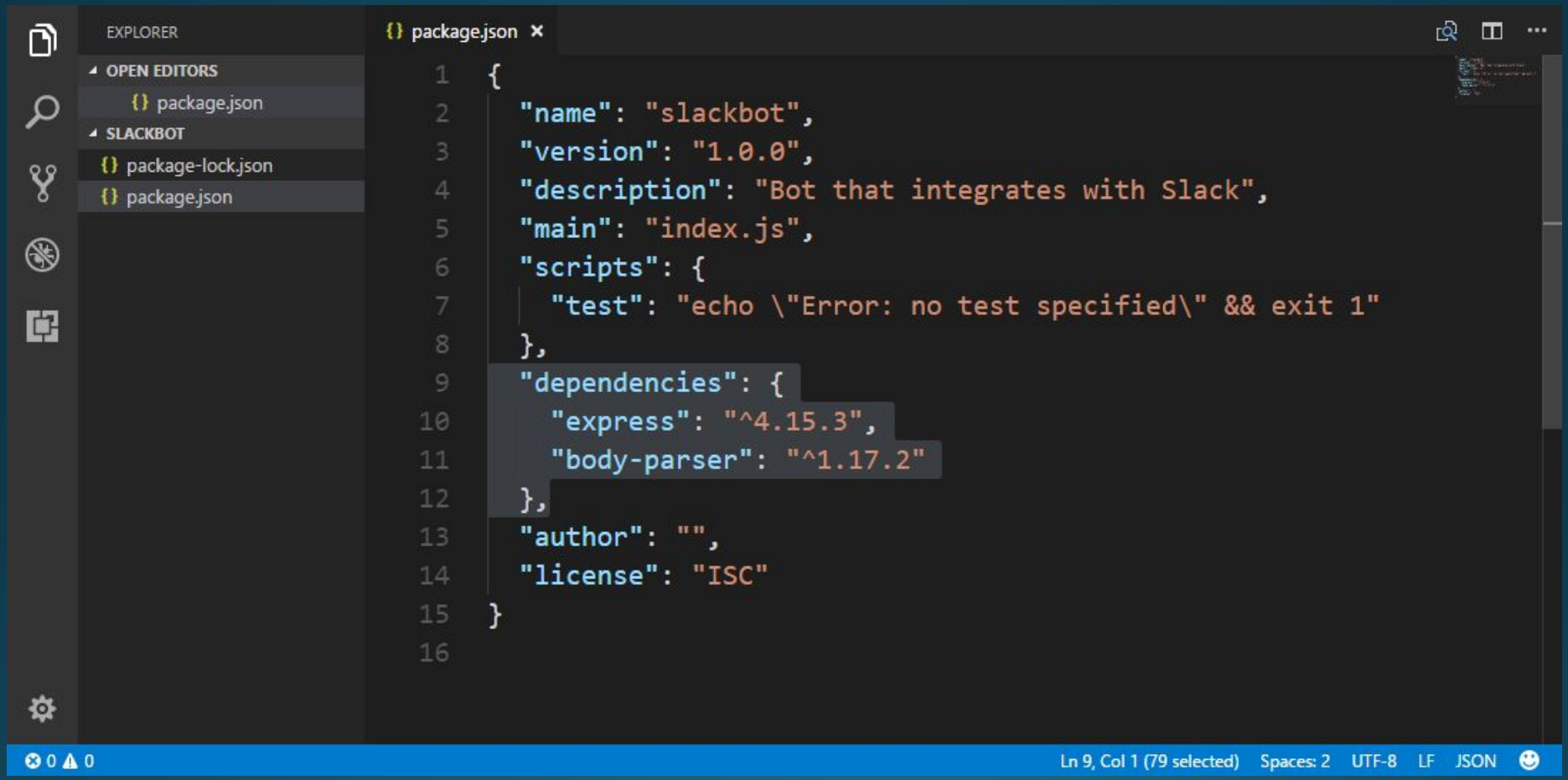
- NodeJS

- IDE

- Browser / Testing tool

Basic Node Express App


EXPLORER
OPEN EDITORS
package.json
SLACKBOT
package-lock.json
package.json
package.json
{
"name": "slackbot",
"version": "1.0.0",
"description": "Bot that integrates with Slack",
"main": "index.js",
"scripts": {
"test": "echo \"Error: no test specified\" && exit 1"
},
"author": "",
"license": "ISC"
}
0 0
Ln 8, Col 5
Spaces: 2
UTF-8
LF
JSON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package-lock.json
package.json
package.json
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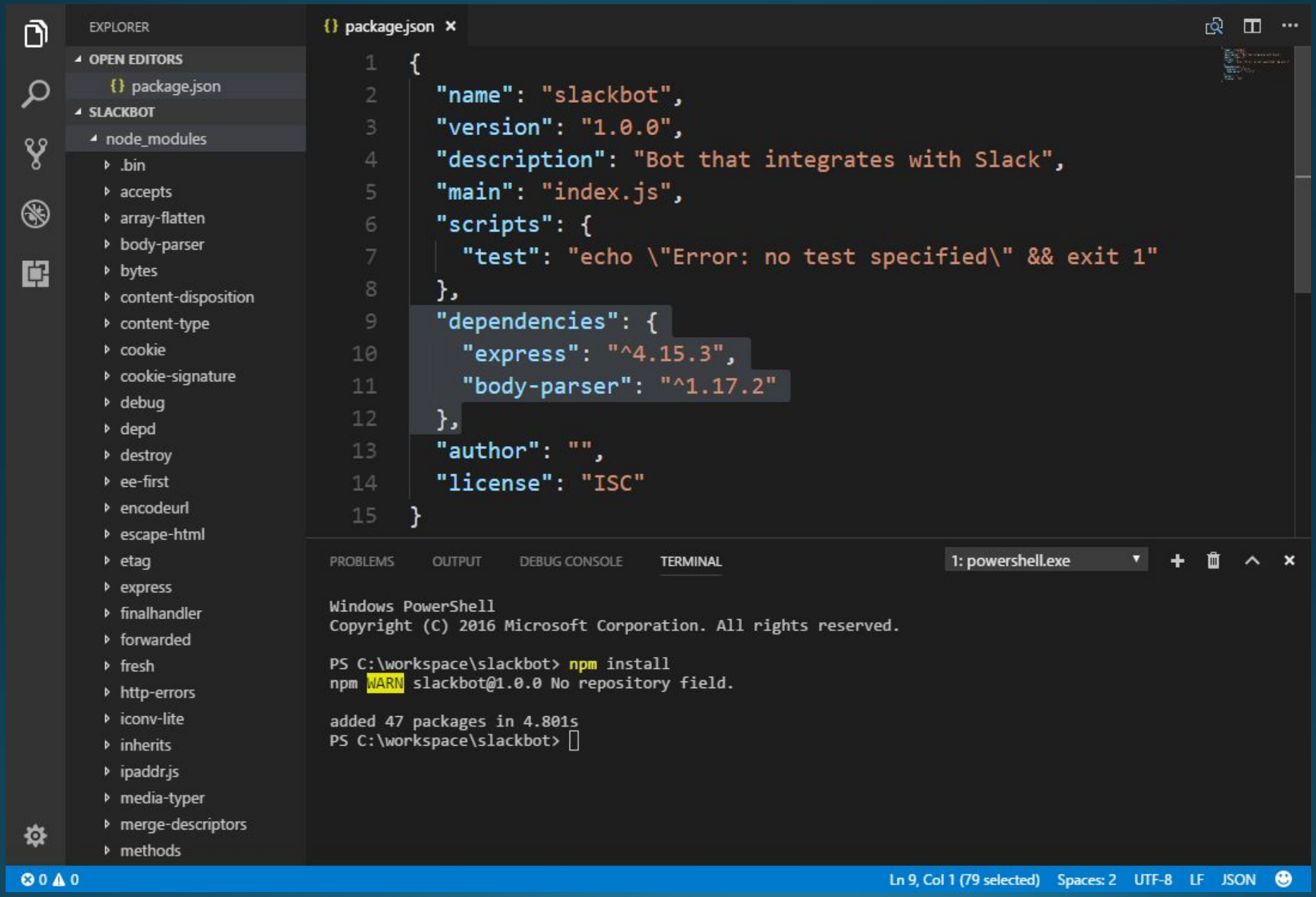
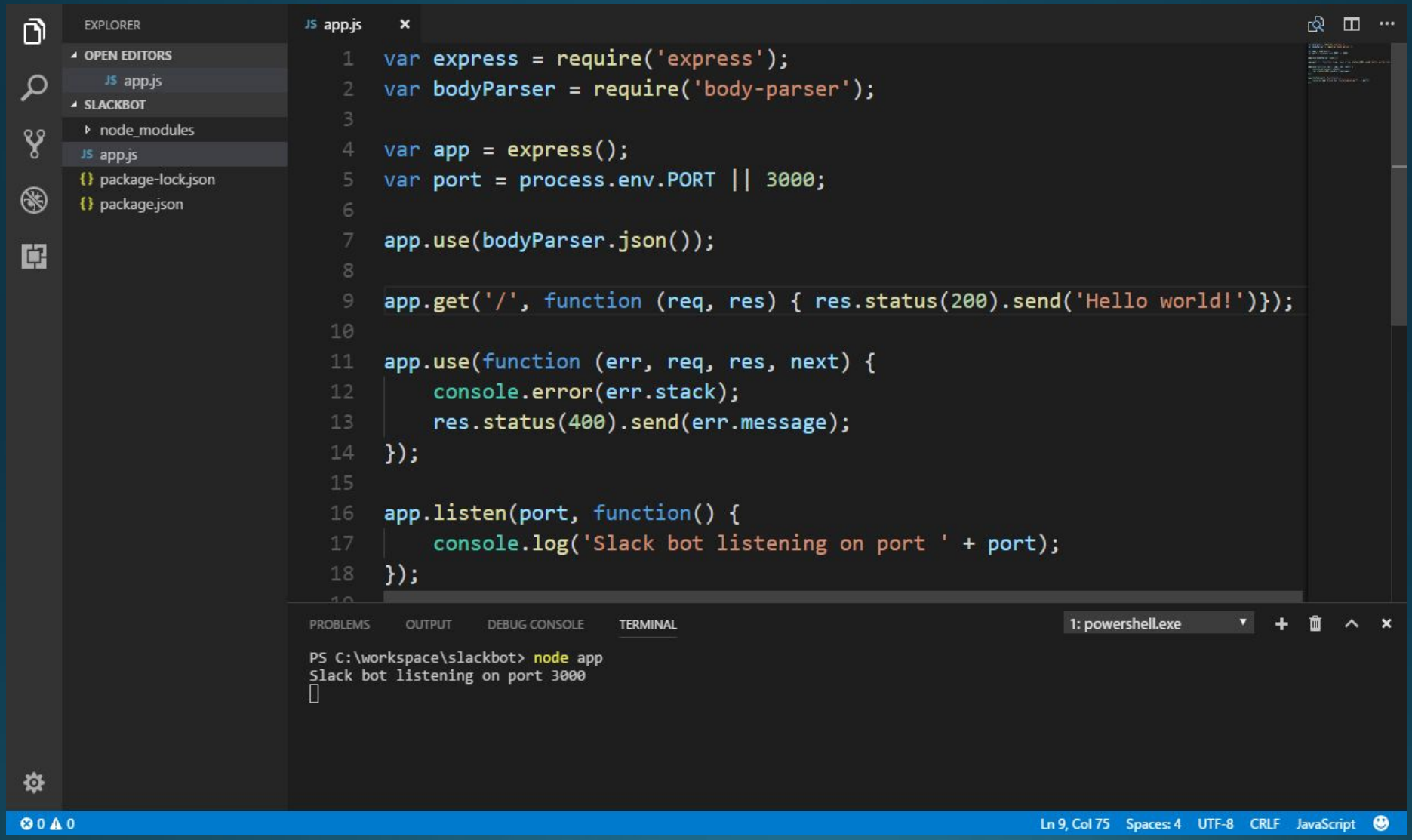
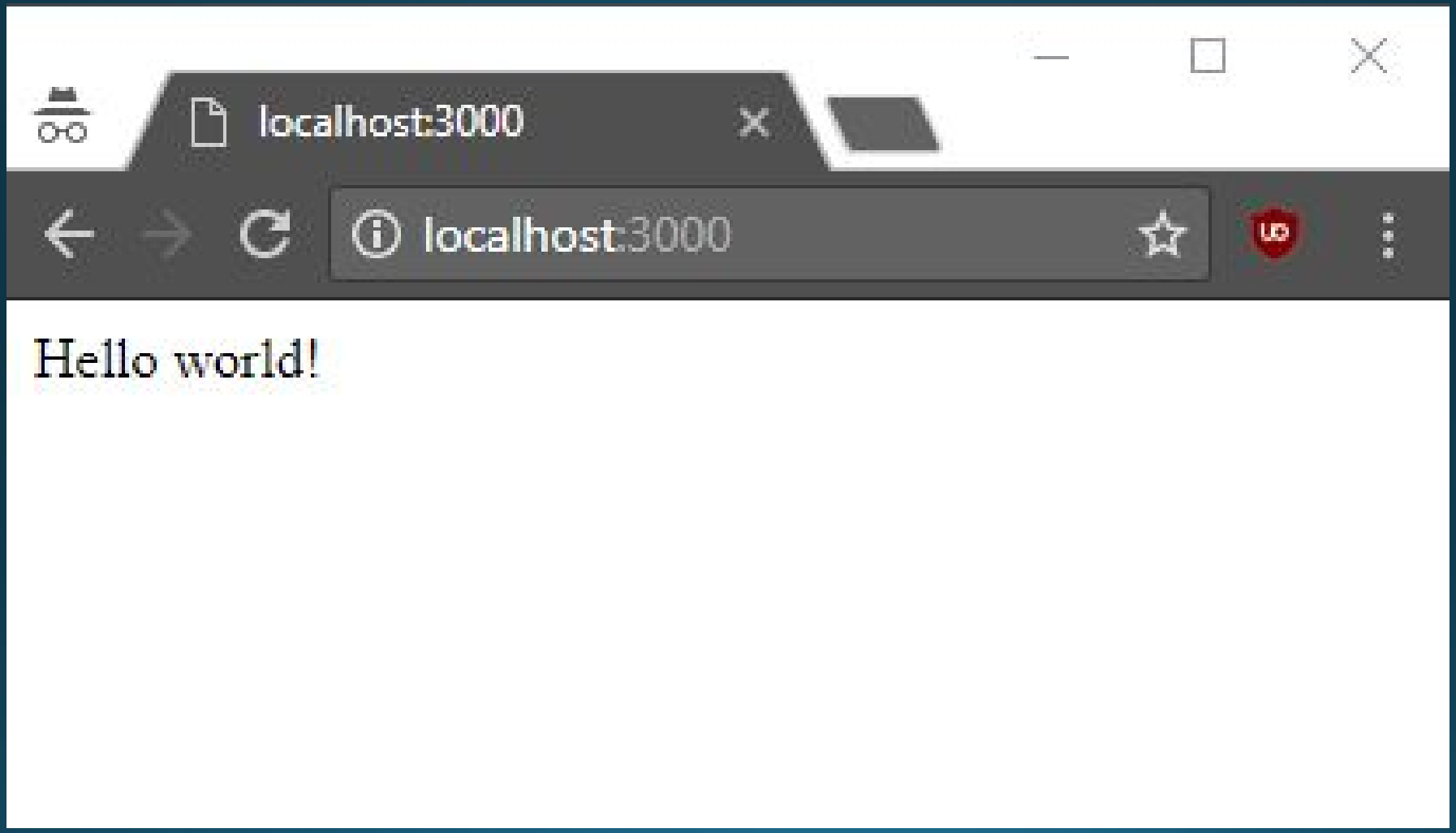
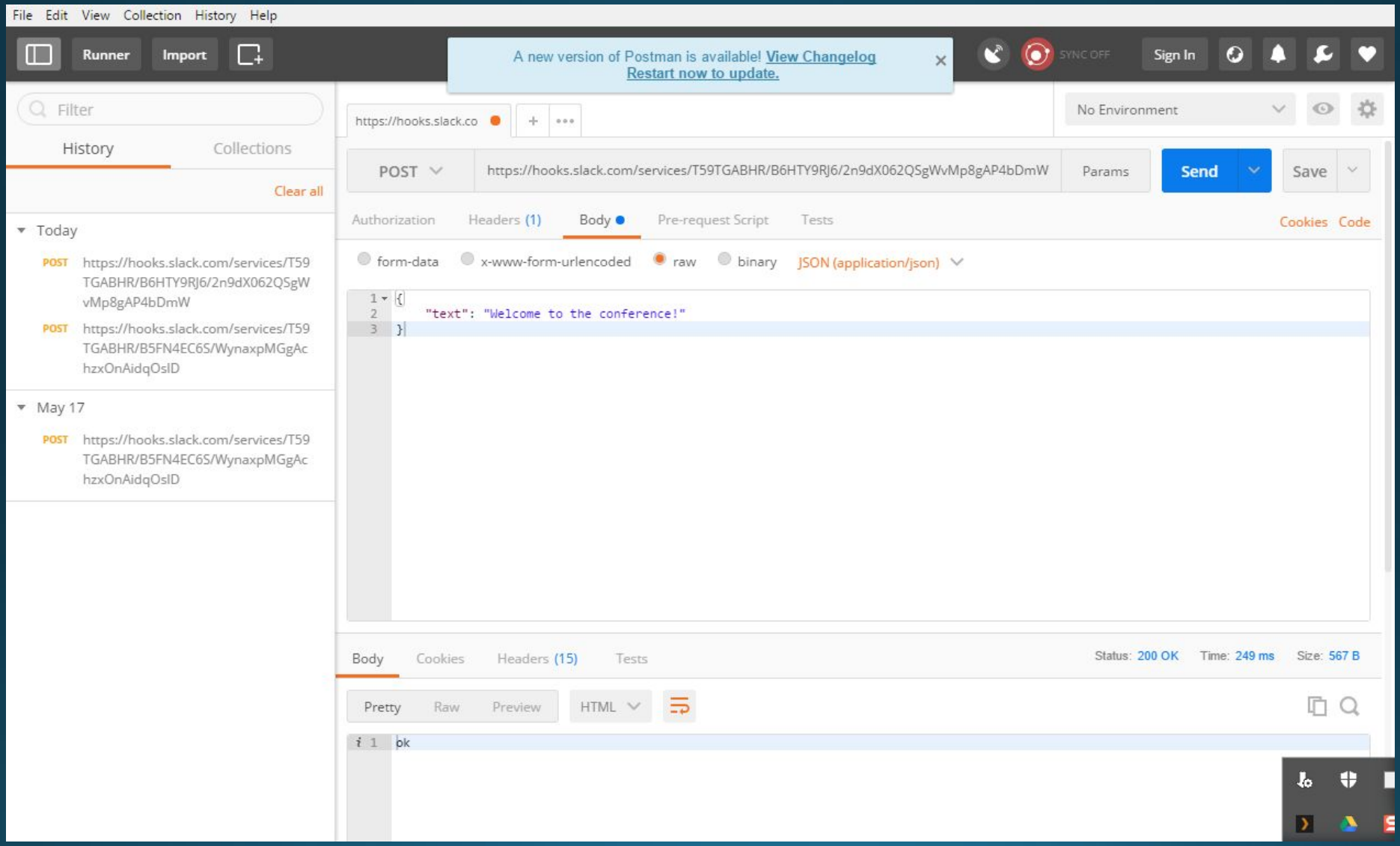
"name": "slackbot",
"version": "1.0.0",
"description": "Bot that integrates with Slack",
"main": "index.js",
"scripts": {
"test": "echo \"Error: no test specified\" && exit 1"
},
"dependencies": {
"express": "^4.15.3",
"body-parser": "^1.17.2"
},
"author": "",
"license": "ISC"
}
0 0
Ln 9, Col 1 (79 selected)
Spaces: 2
UTF-8
LF
JSON

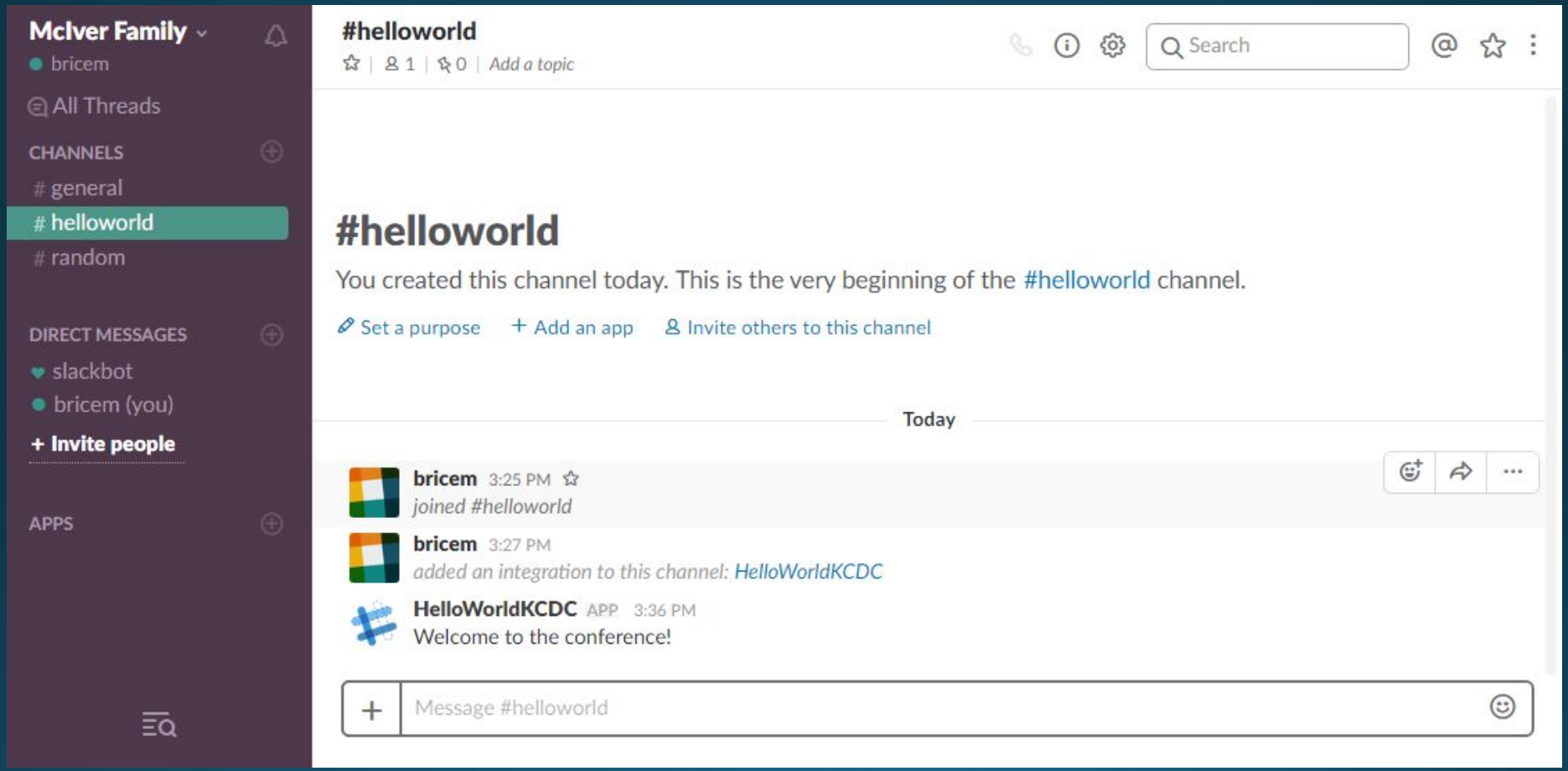

EXPLORER
OPEN EDITORS
package.json
SLACKBOT
node_modules
.bin
accepts
array-flatten
body-parser
bytes
content-disposition
content-type
cookie
cookie-signature
debug
depd
destroy
ee-first
encodeurl
escape-html
etag
express
finalhandler
forwarded
fresh
http-errors
iconv-lite
inherits
ipaddr.js
media-typer
merge-descriptors
methods
package.json
{
"name": "slackbot",
"version": "1.0.0",
"description": "Bot that integrates with Slack",
"main": "index.js",
"scripts": {
"test": "echo \"Error: no test specified\" && exit 1"
},
"dependencies": {
"express": "^4.15.3",
"body-parser": "^1.17.2"
},
"author": "",
"license": "ISC"
}
PROBLEMS
OUTPUT
DEBUG CONSOLE
TERMINAL
1: powershell.exe
Windows PowerShell
Copyright (C) 2016 Microsoft Corporation. All rights reserved.
PS C:\workspace\slackbot> npm install
npm WARN slackbot@1.0.0 No repository field.
added 47 packages in 4.801s
PS C:\workspace\slackbot>
0 0
Ln 9, Col 1 (79 selected)
Spaces: 2
UTF-8
LF
JSON


EXPLORER
OPEN EDITORS
app.js
SLACKBOT
node_modules
app.js
package-lock.json
package.json
app.js
var express = require('express');
var bodyParser = require('body-parser');
var app = express();
var port = process.env.PORT || 3000;
app.use(bodyParser.json());
app.get('/', function (req, res) { res.status(200).send('Hello world!')});
app.use(function (err, req, res, next) {
console.error(err.stack);
res.status(400).send(err.message);
});
app.listen(port, function() {
console.log('Slack bot listening on port ' + port);
});
PROBLEMS
OUTPUT
DEBUG CONSOLE
TERMINAL
1: powershell.exe
PS C:\workspace\slackbot> node app
Slack bot listening on port 3000
0 0
Ln 9, Col 75
Spaces: 4
UTF-8
CRLF
JavaScript

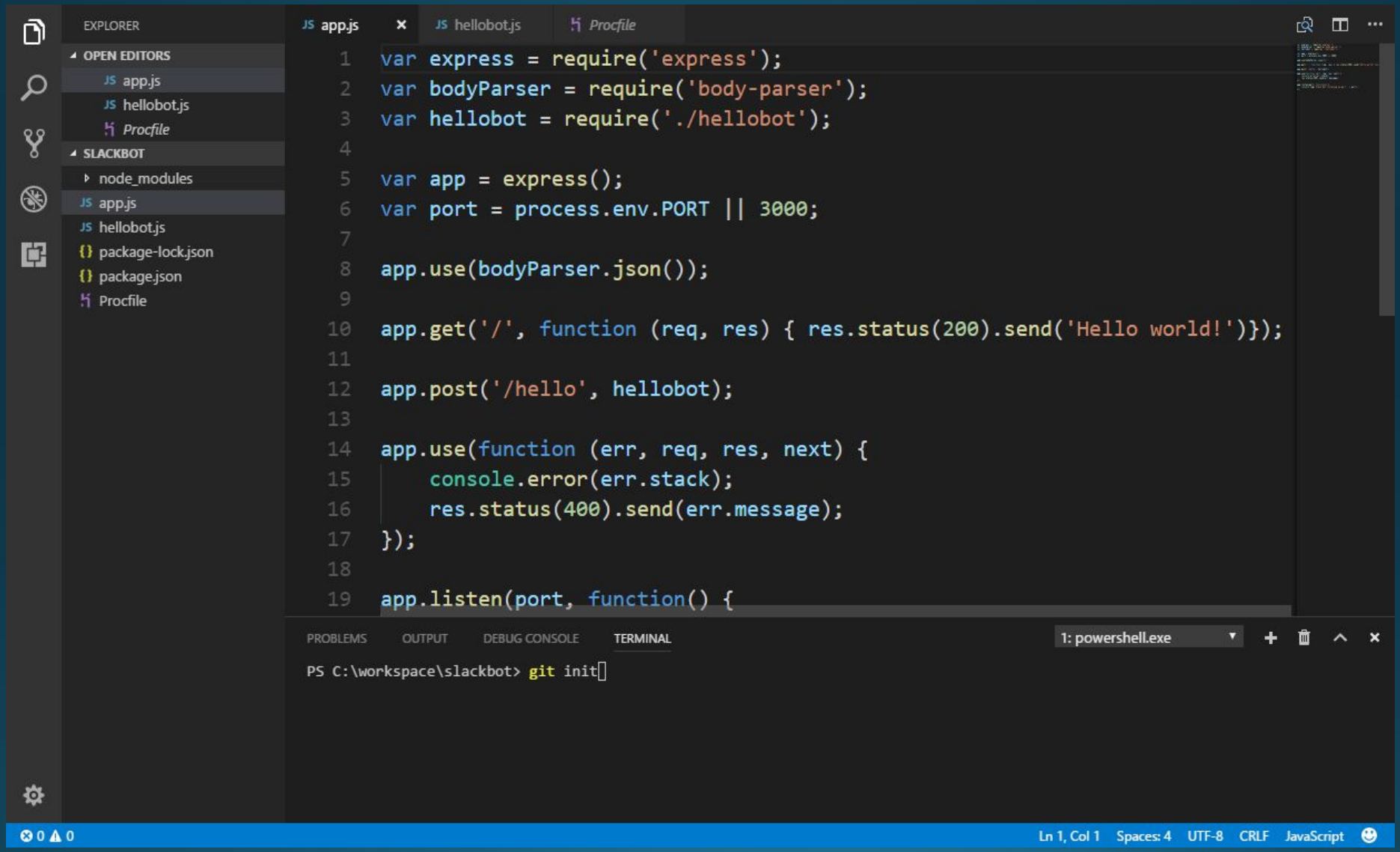

localhost:3000
localhost:3000
Hello world!

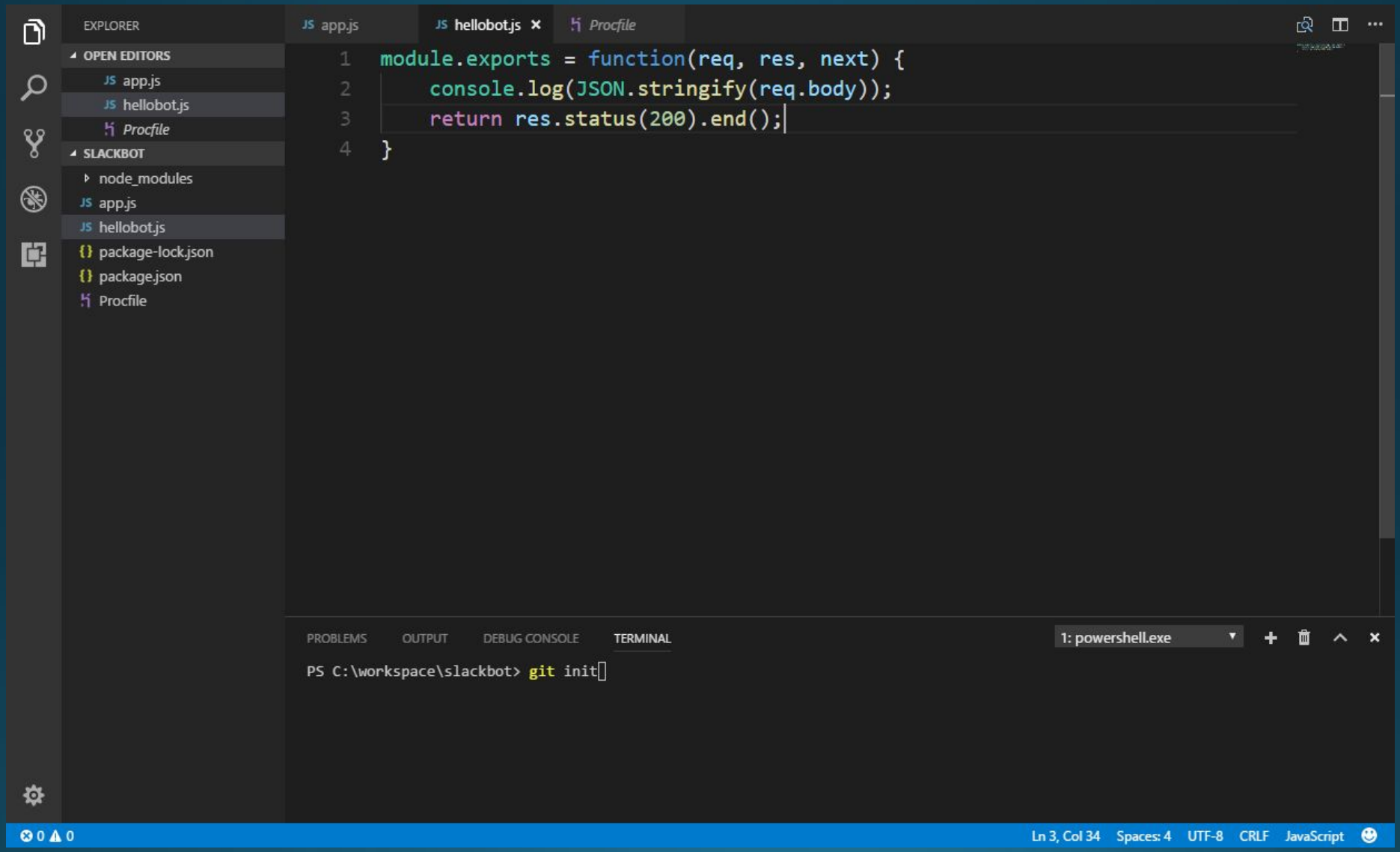
Post Messages Using Incoming Webhooks

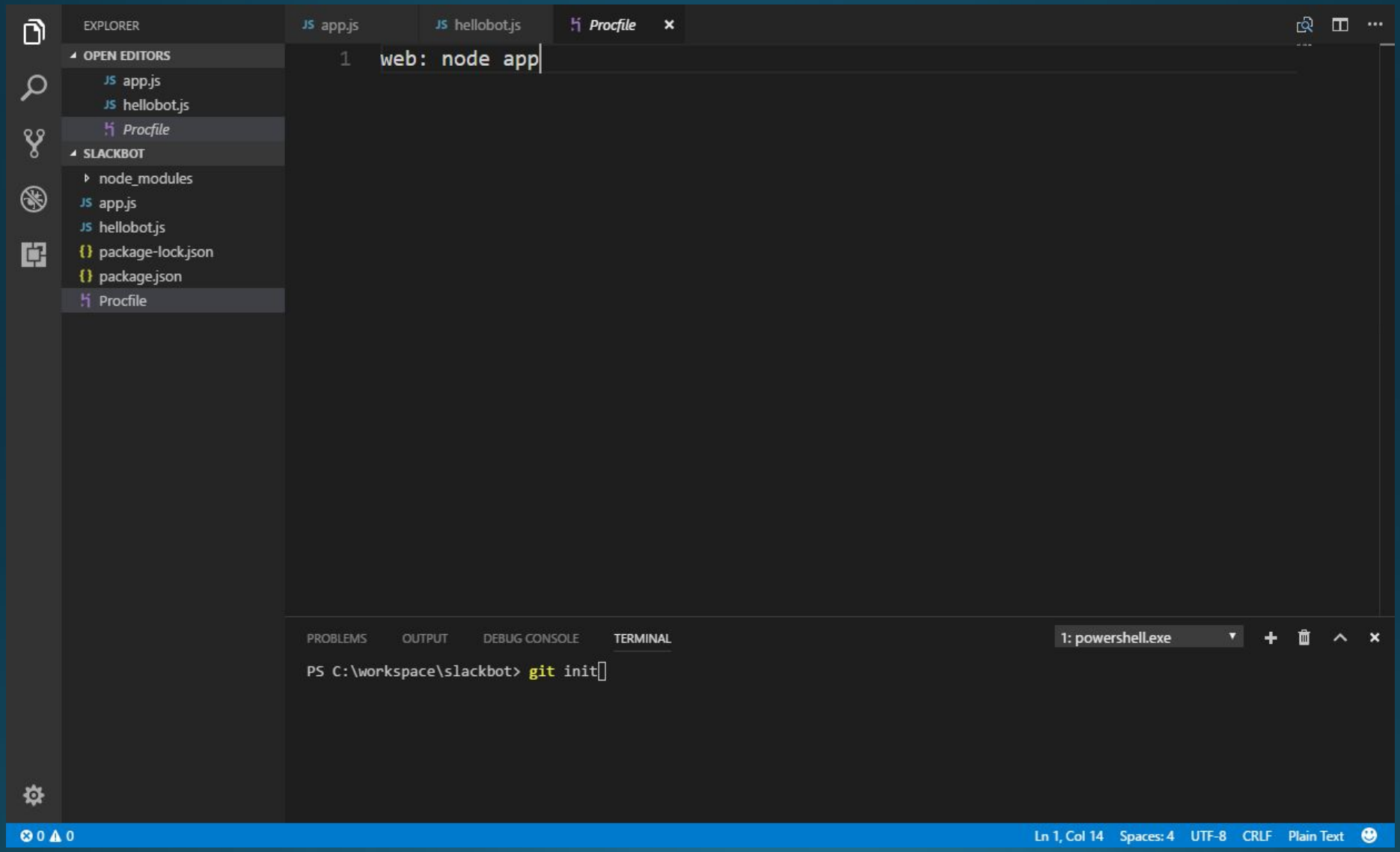

File Edit View Collection History Help
Runner
Import
A new version of Postman is available! View Changelog
Restart now to update.
SYNC OFF
Sign In
Filter
History
Collections
Clear all
Today
POST https://hooks.slack.com/services/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
POST https://hooks.slack.com/services/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
May 17
POST https://hooks.slack.com/services/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
https://hooks.slack.co
No Environment
POST
https://hooks.slack.com/services/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
Params
Send
Save
Authorization
Headers (1)
Body
Pre-request Script
Tests
Cookies
Code
form-data
x-www-form-urlencoded
raw
binary
JSON (application/json)
{
"text": "Welcome to the conference!"
}
Body
Cookies
Headers (15)
Tests
Status: 200 OK
Time: 249 ms
Size: 567 B
Pretty
Raw
Preview
HTML
ok

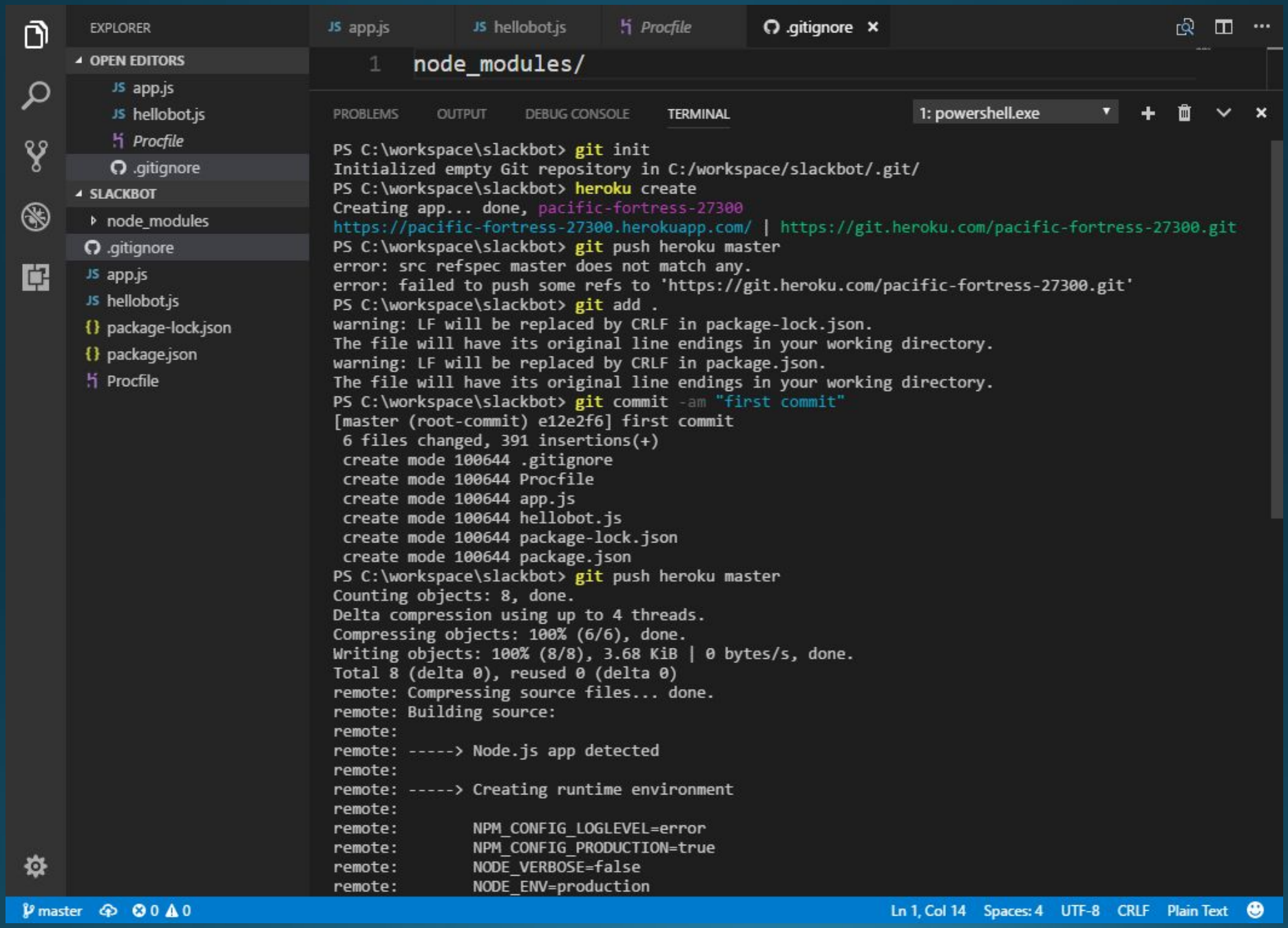

McIver Family
bricem
All Threads
CHANNELS
general
helloworld
random
DIRECT MESSAGES
slackbot
bricem (you)
+ Invite people
APPS
#helloworld
1 | 0 | Add a topic
Search
#helloworld
You created this channel today. This is the very beginning of the #helloworld channel.
Set a purpose
Add an app
Invite others to this channel
Today
bricem 3:25 PM
joined #helloworld
bricem 3:27 PM
added an integration to this channel: HelloWorldKCDC
HelloWorldKCDC APP 3:36 PM
Welcome to the conference!
Message #helloworld

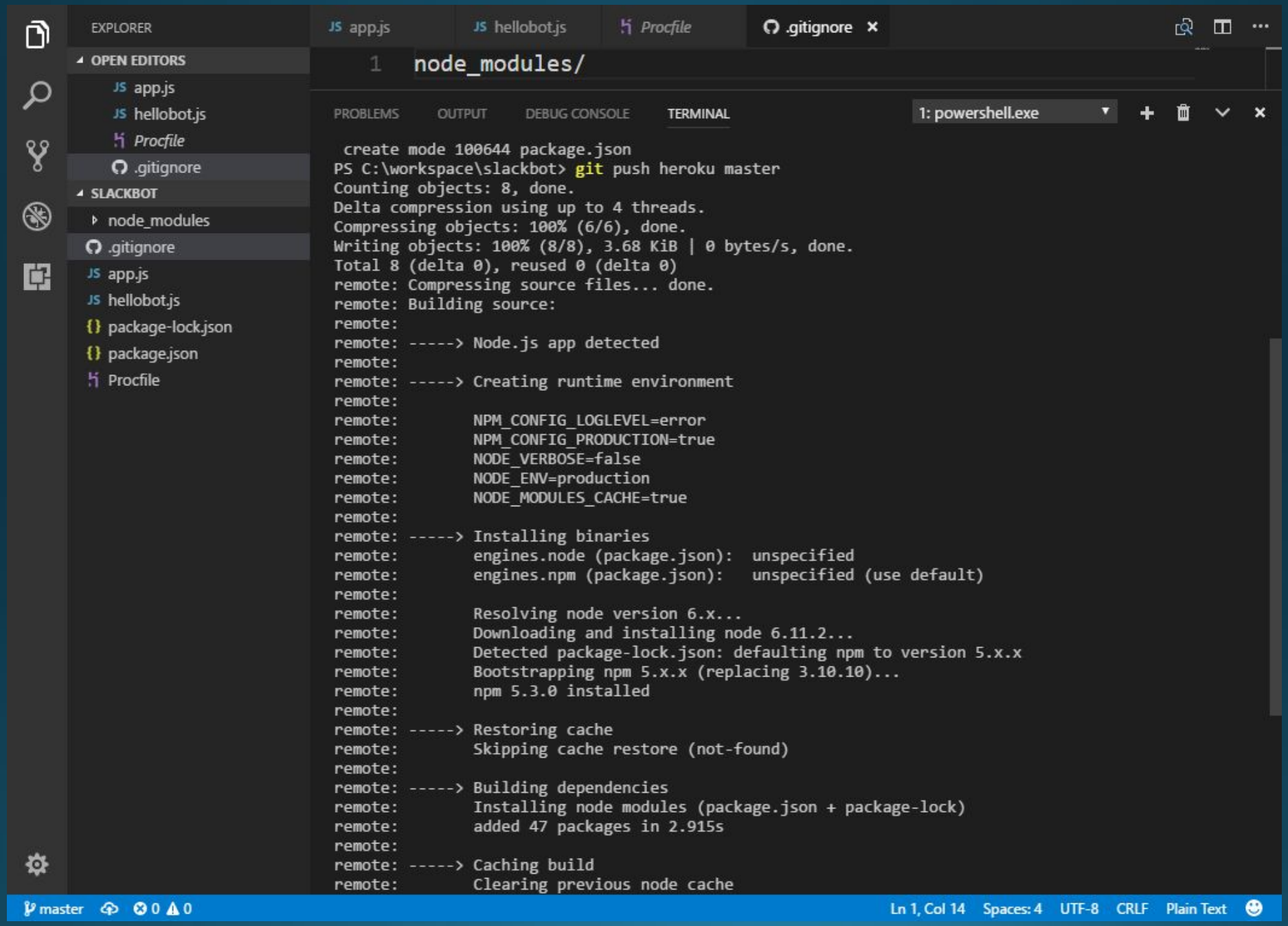
Event Subscriptions


EXPLORER
OPEN EDITORS
app.js
hellobot.js
Procfile
SLACKBOT
node_modules
app.js
hellobot.js
package-lock.json
package.json
Procfile
app.js
hellobot.js
Procfile
var express = require('express');
var bodyParser = require('body-parser');
var hellobot = require('./hellobot');
var app = express();
var port = process.env.PORT || 3000;
app.use(bodyParser.json());
app.get('/', function (req, res) { res.status(200).send('Hello world!')});
app.post('/hello', hellobot);
app.use(function (err, req, res, next) {
console.error(err.stack);
res.status(400).send(err.message);
});
app.listen(port, function() {
PROBLEMS
OUTPUT
DEBUG CONSOLE
TERMINAL
1: powershell.exe
PS C:\workspace\slackbot> git init
0 0
Ln 1, Col 1
Spaces: 4
UTF-8
CRLF
JavaScript


EXPLORER
OPEN EDITORS
app.js
hellobot.js
Procfile
SLACKBOT
node_modules
app.js
hellobot.js
package-lock.json
package.json
Procfile
app.js
hellobot.js
Procfile
1 module.exports = function(req, res, next) {
2 console.log(JSON.stringify(req.body));
3 return res.status(200).end();
4 }
PROBLEMS
OUTPUT
DEBUG CONSOLE
TERMINAL
1: powershell.exe
PS C:\workspace\slackbot> git init
0 0
Ln 3, Col 34
Spaces: 4
UTF-8
CRLF
JavaScript


EXPLORER
app.js
hellobot.js
Procfile
OPEN EDITORS
app.js
hellobot.js
Procfile
SLACKBOT
node_modules
app.js
hellobot.js
package-lock.json
package.json
Procfile
1 web: node app
PROBLEMS
OUTPUT
DEBUG CONSOLE
TERMINAL
1: powershell.exe
PS C:\workspace\slackbot> git init
0 0
Ln 1, Col 14
Spaces: 4
UTF-8
CRLF
Plain Text


EXPLORER
app.js
hellobot.js
Procfile
.gitignore
node_modules/
OPEN EDITORS
app.js
hellobot.js
Procfile
.gitignore
SLACKBOT
node_modules
.gitignore
app.js
hellobot.js
package-lock.json
package.json
Procfile
PROBLEMS
OUTPUT
DEBUG CONSOLE
TERMINAL
1: powershell.exe
PS C:\workspace\slackbot> git init
Initialized empty Git repository in C:/workspace/slackbot/.git/
PS C:\workspace\slackbot> heroku create
Creating app... done, pacific-fortress-27300
https://pacific-fortress-27300.herokuapp.com/ | https://git.heroku.com/pacific-fortress-27300.git
PS C:\workspace\slackbot> git push heroku master
error: src refspec master does not match any.
error: failed to push some refs to 'https://git.heroku.com/pacific-fortress-27300.git'
PS C:\workspace\slackbot> git add .
warning: LF will be replaced by CRLF in package-lock.json.
The file will have its original line endings in your working directory.
warning: LF will be replaced by CRLF in package.json.
The file will have its original line endings in your working directory.
PS C:\workspace\slackbot> git commit -am "first commit"
[master (root-commit) e12e2f6] first commit
6 files changed, 391 insertions(+)
create mode 100644 .gitignore
create mode 100644 Procfile
create mode 100644 app.js
create mode 100644 hellobot.js
create mode 100644 package-lock.json
create mode 100644 package.json
PS C:\workspace\slackbot> git push heroku master
Counting objects: 8, done.
Delta compression using up to 4 threads.
Compressing objects: 100% (6/6), done.
Writing objects: 100% (8/8), 3.68 KiB | 0 bytes/s, done.
Total 8 (delta 0), reused 0 (delta 0)
remote: Compressing source files... done.
remote: Building source:
remote:
remote: -----> Node.js app detected
remote:
remote: -----> Creating runtime environment
remote:
remote: NPM_CONFIG_LOGLEVEL=error
remote: NPM_CONFIG_PRODUCTION=true
remote: NODE_VERBOSE=false
remote: NODE_ENV=production
master
0 0
Ln 1, Col 14
Spaces: 4
UTF-8
CRLF
Plain Text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Procfile
.gitignore
node_modules/
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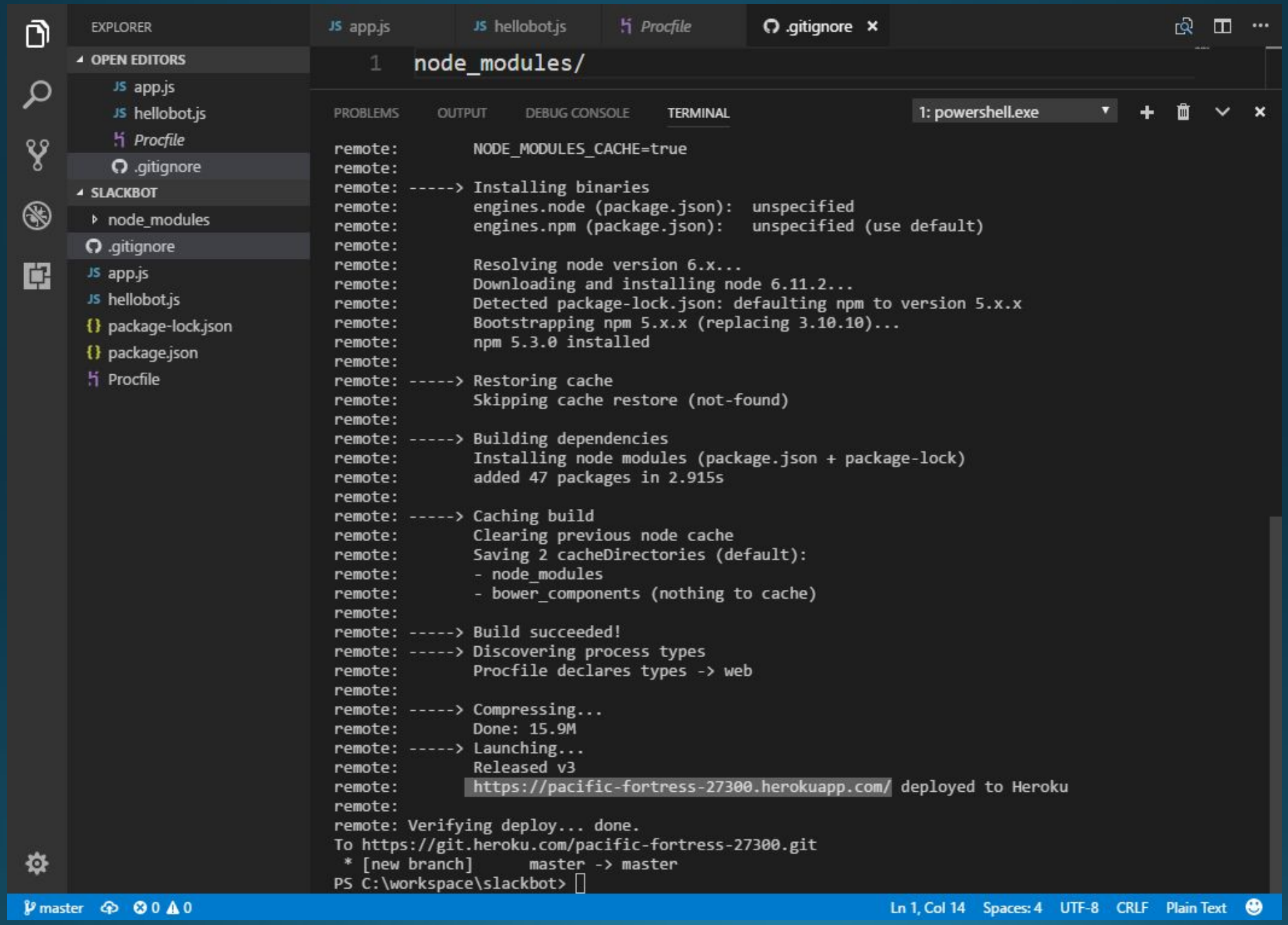
hellobot.js
Procfile
.gitignore
SLACKBOT
node_modules
.gitignore
app.js
hellobot.js
package-lock.json
package.json
Procfile
PROBLEMS
OUTPUT
DEBUG CONSOLE
TERMINAL
1: powershell.exe
create mode 100644 package.json
PS C:\workspace\slackbot> git push heroku master
Counting objects: 8, done.
Delta compression using up to 4 threads.
Compressing objects: 100% (6/6), done.
Writing objects: 100% (8/8), 3.68 KiB | 0 bytes/s, done.
Total 8 (delta 0), reused 0 (delta 0)
remote: Compressing source files... done.
remote: Building source:
remote:
remote: -----> Node.js app detected
remote:
remote: -----> Creating runtime environment
remote:
remote: NPM_CONFIG_LOGLEVEL=error
remote: NPM_CONFIG_PRODUCTION=true
remote: NODE_VERBOSE=false
remote: NODE_ENV=production
remote: NODE_MODULES_CACHE=true
remote:
remote: -----> Installing binaries
remote: engines.node (package.json): unspecified
remote: engines.npm (package.json): unspecified (use default)
remote:
remote: Resolving node version 6.x...
remote: Downloading and installing node 6.11.2...
remote: Detected package-lock.json: defaulting npm to version 5.x.x
remote: Bootstrapping npm 5.x.x (replacing 3.10.10)...
remote: npm 5.3.0 installed
remote:
remote: -----> Restoring cache
remote: Skipping cache restore (not-found)
remote:
remote: -----> Building dependencies
remote: Installing node modules (package.json + package-lock)
remote: added 47 packages in 2.915s
remote:
remote: -----> Caching build
remote: Clearing previous node cache
master
0 0
Ln 1, Col 14
Spaces: 4
UTF-8
CRLF
Plain Text


EXPLORER
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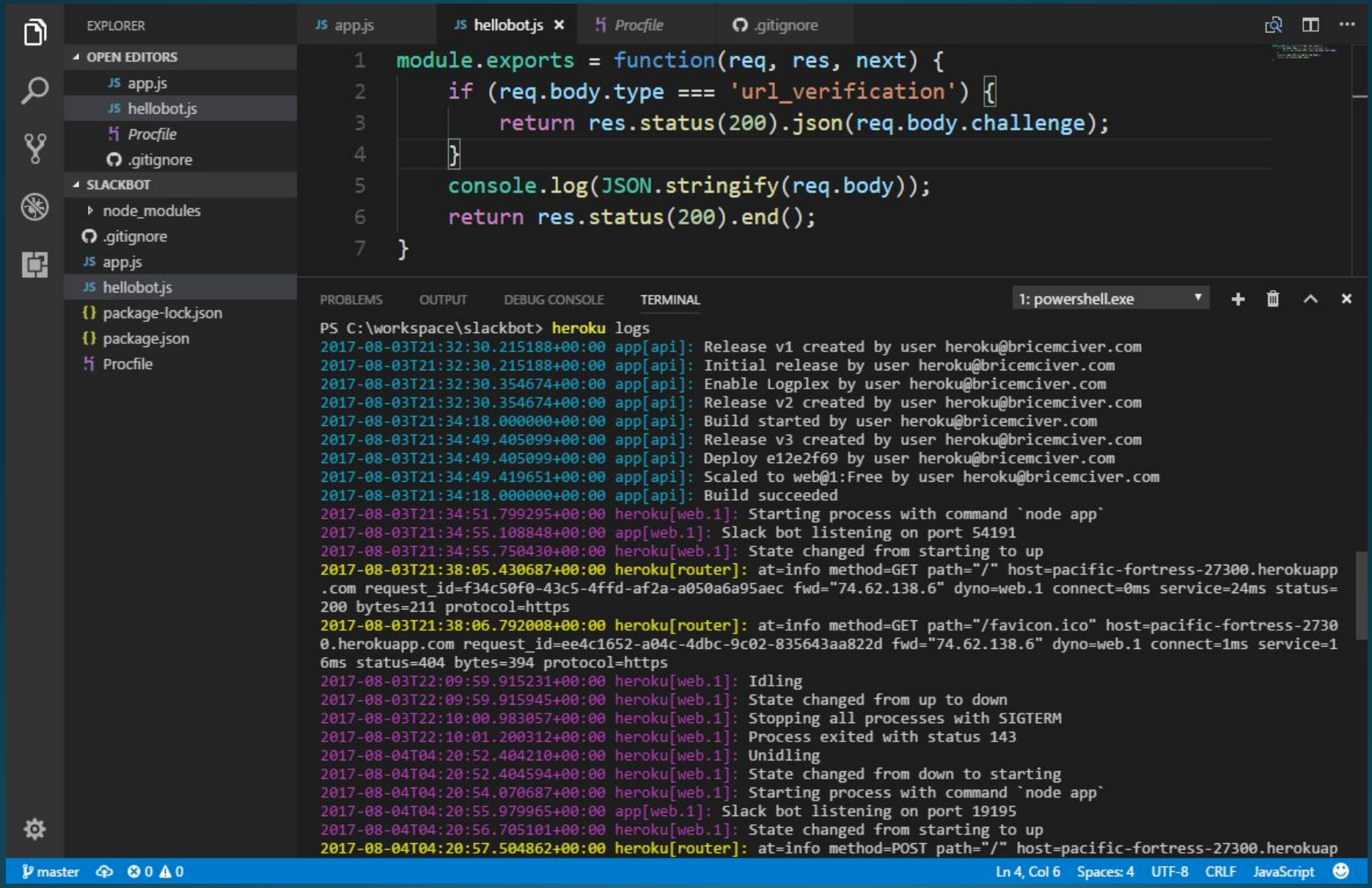
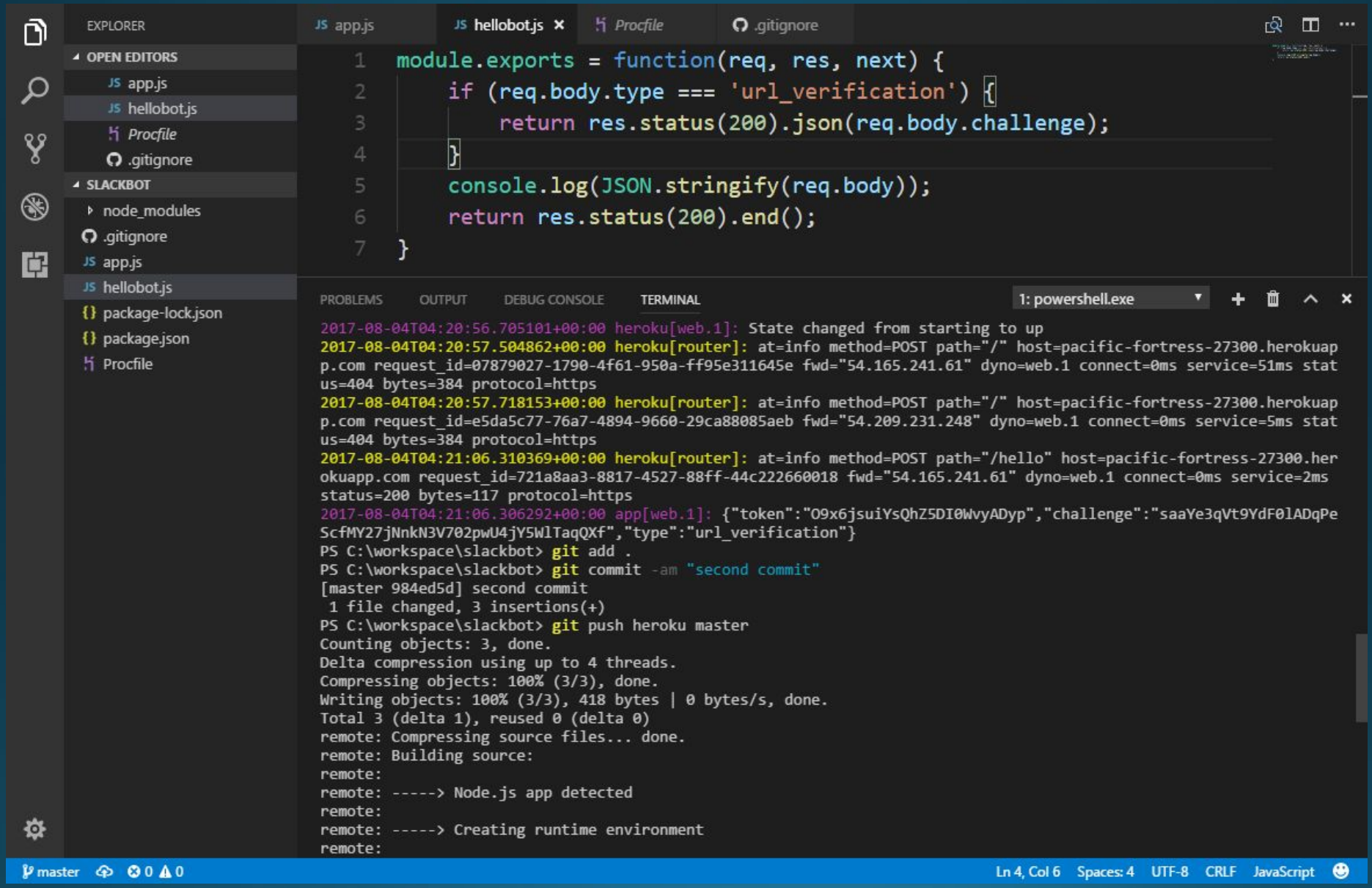
app.js
hellobot.js
Procfile
.gitignore
SLACKBOT
node_modules
.gitignore
app.js
hellobot.js
package-lock.json
package.json
Procfile
app.js
hellobot.js
Procfile
.gitignore
1 node_modules/
PROBLEMS
OUTPUT
DEBUG CONSOLE
TERMINAL
1: powershell.exe
remote: NODE_MODULES_CACHE=true
remote:
remote: -----> Installing binaries
remote: engines.node (package.json): unspecified
remote: engines.npm (package.json): unspecified (use default)
remote:
remote: Resolving node version 6.x...
remote: Downloading and installing node 6.11.2...
remote: Detected package-lock.json: defaulting npm to version 5.x.x
remote: Bootstrapping npm 5.x.x (replacing 3.10.10)...
remote: npm 5.3.0 installed
remote:
remote: -----> Restoring cache
remote: Skipping cache restore (not-found)
remote:
remote: -----> Building dependencies
remote: Installing node modules (package.json + package-lock)
remote: added 47 packages in 2.915s
remote:
remote: -----> Caching build
remote: Clearing previous node cache
remote: Saving 2 cacheDirectories (default):
remote: - node_modules
remote: - bower_components (nothing to cache)
remote:
remote: -----> Build succeeded!
remote: -----> Discovering process types
remote: Procfile declares types -> web
remote:
remote: -----> Compressing...
remote: Done: 15.9M
remote: -----> Launching...
remote: Released v3
remote: https://pacific-fortress-27300.herokuapp.com/ deployed to Heroku
remote:
remote: Verifying deploy... done.
To https://git.heroku.com/pacific-fortress-27300.git
* [new branch] master -> master
PS C:\workspace\slackbot>
master
0 0
Ln 1, Col 14
Spaces: 4
UTF-8
CRLF
Plain Text


EXPLORER
OPEN EDITORS
app.js
hellobot.js
Procfile
.gitignore
SLACKBOT
node_modules
.gitignore
app.js
hellobot.js
package-lock.json
package.json
Procfile
app.js
hellobot.js
Procfile
.gitignore
1 module.exports = function(req, res, next) {
2 if (req.body.type === 'url_verification') {
3 return res.status(200).json(req.body.challenge);
4 }
5 console.log(JSON.stringify(req.body));
6 return res.status(200).end();
7 }
PROBLEMS
OUTPUT
DEBUG CONSOLE
TERMINAL
1: powershell.exe
PS C:\workspace\slackbot> heroku logs
2017-08-03T21:32:30.215188+00:00 app[api]: Release v1 created by user heroku@bricemciver.com
2017-08-03T21:32:30.215188+00:00 app[api]: Initial release by user heroku@bricemciver.com
2017-08-03T21:32:30.354674+00:00 app[api]: Enable Logplex by user heroku@bricemciver.com
2017-08-03T21:32:30.354674+00:00 app[api]: Release v2 created by user heroku@bricemciver.com
2017-08-03T21:34:18.000000+00:00 app[api]: Build started by user heroku@bricemciver.com
2017-08-03T21:34:49.405099+00:00 app[api]: Release v3 created by user heroku@bricemciver.com
2017-08-03T21:34:49.405099+00:00 app[api]: Deploy e12e2f69 by user heroku@bricemciver.com
2017-08-03T21:34:49.419651+00:00 app[api]: Scaled to web@1:Free by user heroku@bricemciver.com
2017-08-03T21:34:18.000000+00:00 app[api]: Build succeeded
2017-08-03T21:34:51.799295+00:00 heroku[web.1]: Starting process with command `node app`
2017-08-03T21:34:55.108848+00:00 app[web.1]: Slack bot listening on port 54191
2017-08-03T21:34:55.750430+00:00 heroku[web.1]: State changed from starting to up
2017-08-03T21:38:05.430687+00:00 heroku[router]: at=info method=GET path="/" host=pacific-fortress-27300.herokuapp
.com request_id=f34c50f0-43c5-4ffd-af2a-a050a6a95aec fwd="74.62.138.6" dyno=web.1 connect=0ms service=24ms status=
200 bytes=211 protocol=https
2017-08-03T21:38:06.792008+00:00 heroku[router]: at=info method=GET path="/favicon.ico" host=pacific-fortress-2730
0.herokuapp.com request_id=ee4c1652-a04c-4dbc-9c02-835643aa822d fwd="74.62.138.6" dyno=web.1 connect=1ms service=1
6ms status=404 bytes=394 protocol=https
2017-08-03T22:09:59.915231+00:00 heroku[web.1]: Idling
2017-08-03T22:09:59.915945+00:00 heroku[web.1]: State changed from up to down
2017-08-03T22:10:00.983057+00:00 heroku[web.1]: Stopping all processes with SIGTERM
2017-08-03T22:10:01.200312+00:00 heroku[web.1]: Process exited with status 143
2017-08-04T04:20:52.404210+00:00 heroku[web.1]: Unidling
2017-08-04T04:20:52.404594+00:00 heroku[web.1]: State changed from down to starting
2017-08-04T04:20:54.070687+00:00 heroku[web.1]: Starting process with command `node app`
2017-08-04T04:20:55.979965+00:00 app[web.1]: Slack bot listening on port 19195
2017-08-04T04:20:56.705101+00:00 heroku[web.1]: State changed from starting to up
2017-08-04T04:20:57.504862+00:00 heroku[router]: at=info method=POST path="/" host=pacific-fortress-27300.herokuap
master
0 0
Ln 4, Col 6
Spaces: 4
UTF-8
CRLF
JavaScript


EXPLORER
OPEN EDITORS
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SLACKBOT
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.gitignore
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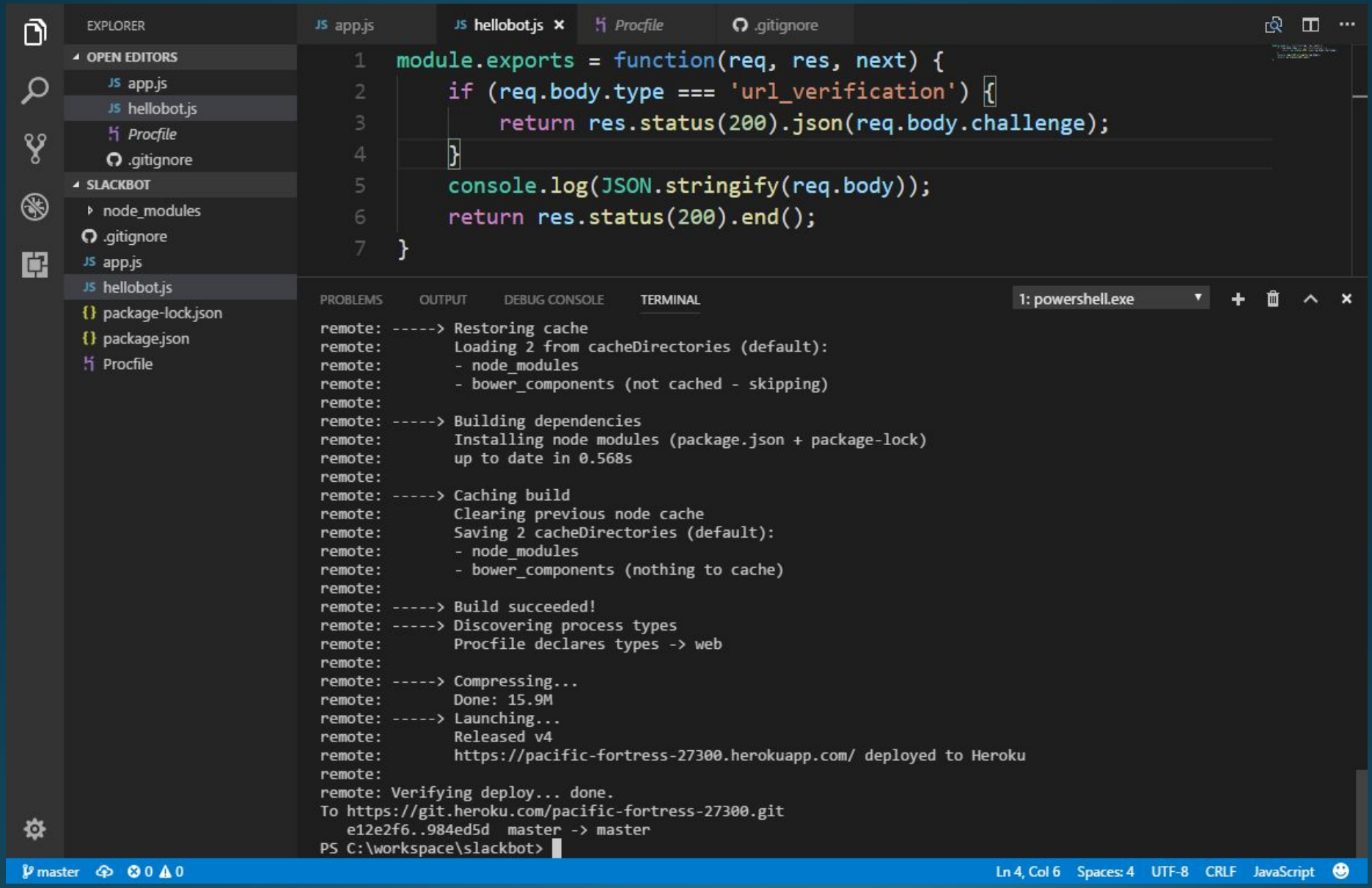
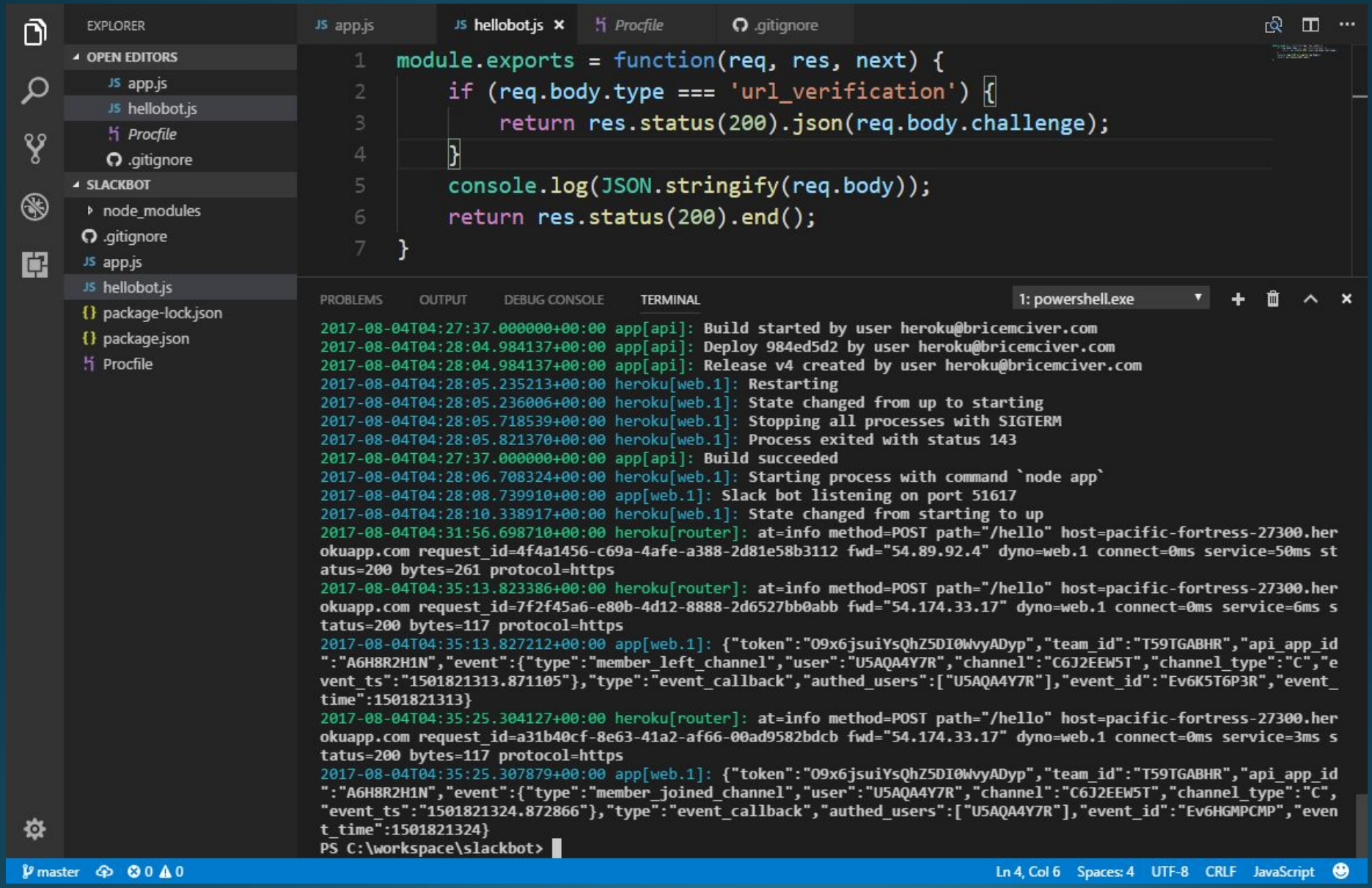
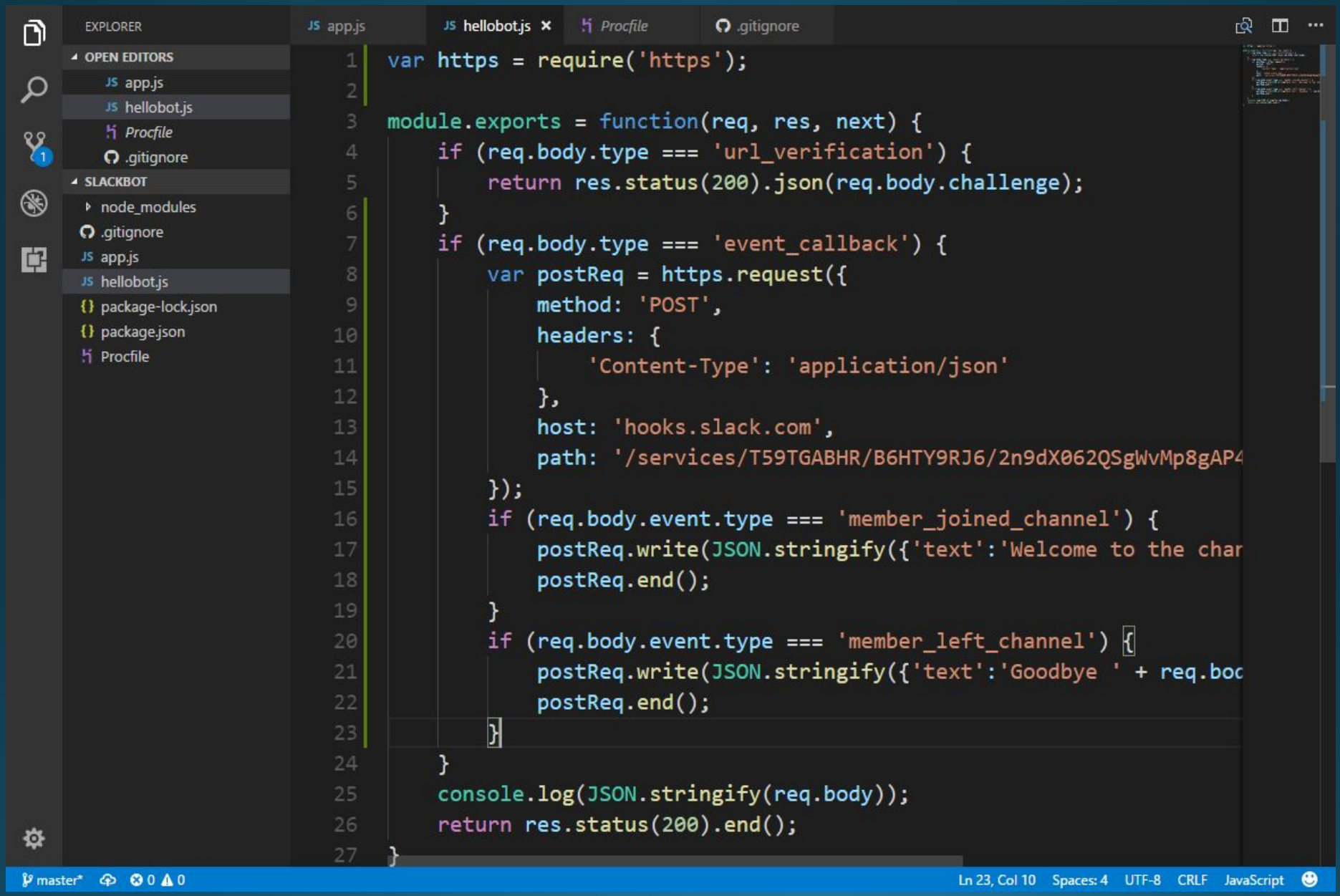
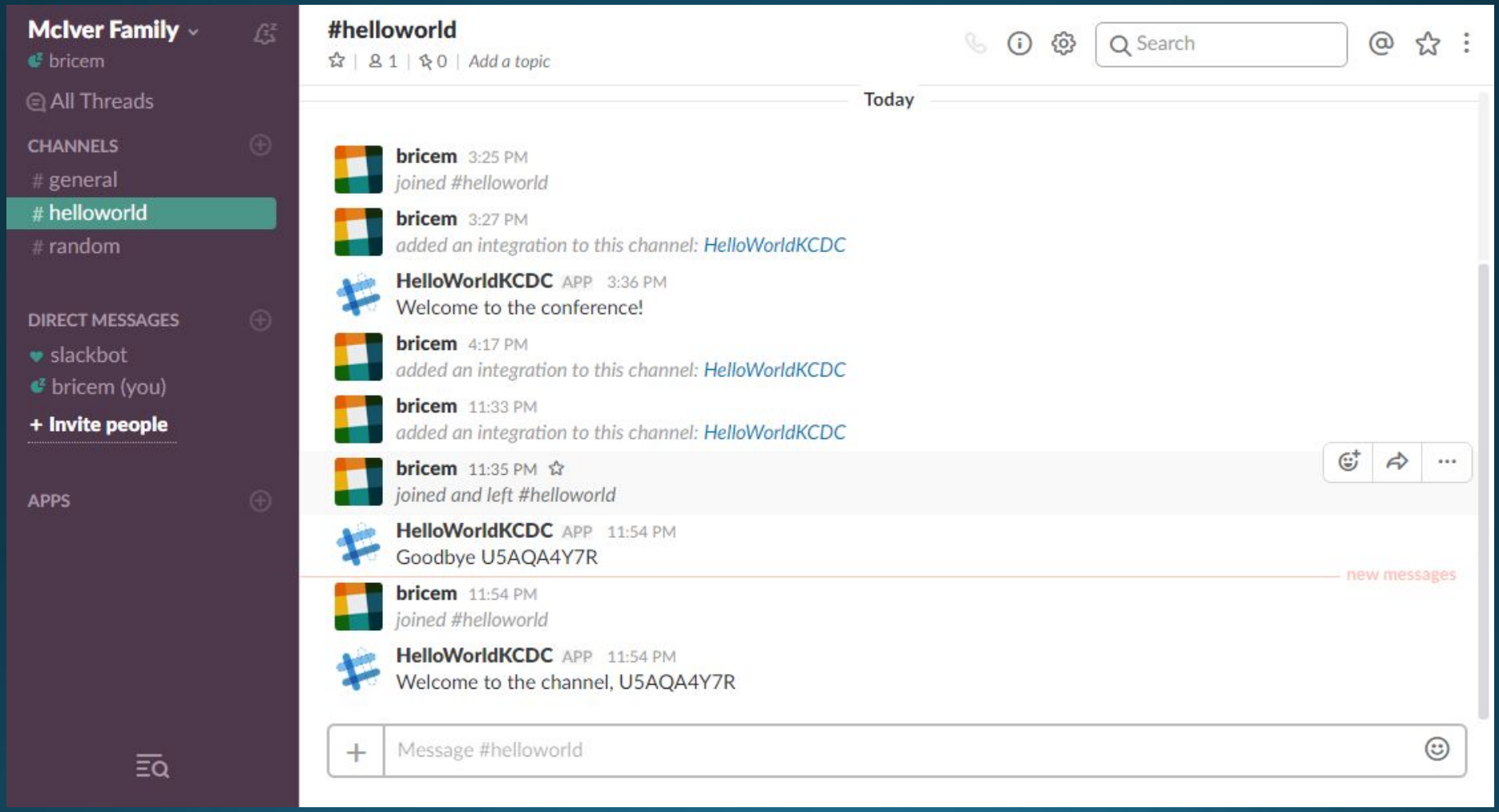
hellobot.js
package-lock.json
package.json
Procfile
app.js
hellobot.js
Procfile
.gitignore
module.exports = function(req, res, next) {
if (req.body.type === 'url_verification') {
return res.status(200).json(req.body.challenge);
}
console.log(JSON.stringify(req.body));
return res.status(200).end();
}
PROBLEMS
OUTPUT
DEBUG CONSOLE
TERMINAL
1: powershell.exe
2017-08-04T04:20:56.705101+00:00 heroku[web.1]: State changed from starting to up
2017-08-04T04:20:57.504862+00:00 heroku[router]: at=info method=POST path="/" host=pacific-fortress-27300.herokuapp.com request_id=07879027-1790-4f61-950a-ff95e311645e fwd="54.165.241.61" dyno=web.1 connect=0ms service=51ms status=404 bytes=384 protocol=https
2017-08-04T04:20:57.718153+00:00 heroku[router]: at=info method=POST path="/" host=pacific-fortress-27300.herokuapp.com request_id=e5da5c77-76a7-4894-9660-29ca88085aeb fwd="54.209.231.248" dyno=web.1 connect=0ms service=5ms status=404 bytes=384 protocol=https
2017-08-04T04:21:06.310369+00:00 heroku[router]: at=info method=POST path="/hello" host=pacific-fortress-27300.herokuapp.com request_id=721a8aa3-8817-4527-88ff-44c222660018 fwd="54.165.241.61" dyno=web.1 connect=0ms service=2ms status=200 bytes=117 protocol=https
2017-08-04T04:21:06.306292+00:00 app[web.1]: {"token":"O9x6jsuiYsQhZ5DI0WvyADyp","challenge":"saaYe3qVt9YdF0lADqPeScfMY27jNnkN3V702pwU4jY5WlTaqQXf","type":"url_verification"}
PS C:\workspace\slackbot> git add .
PS C:\workspace\slackbot> git commit -am "second commit"
[master 984ed5d] second commit
1 file changed, 3 insertions(+)
PS C:\workspace\slackbot> git push heroku master
Counting objects: 3, done.
Delta compression using up to 4 threads.
Compressing objects: 100% (3/3), done.
Writing objects: 100% (3/3), 418 bytes | 0 bytes/s, done.
Total 3 (delta 1), reused 0 (delta 0)
remote: Compressing source files... done.
remote: Building source:
remote:
remote: -----> Node.js app detected
remote:
remote: -----> Creating runtime environment
remote:
master
0 0
Ln 4, Col 6
Spaces: 4
UTF-8
CRLF
JavaScript

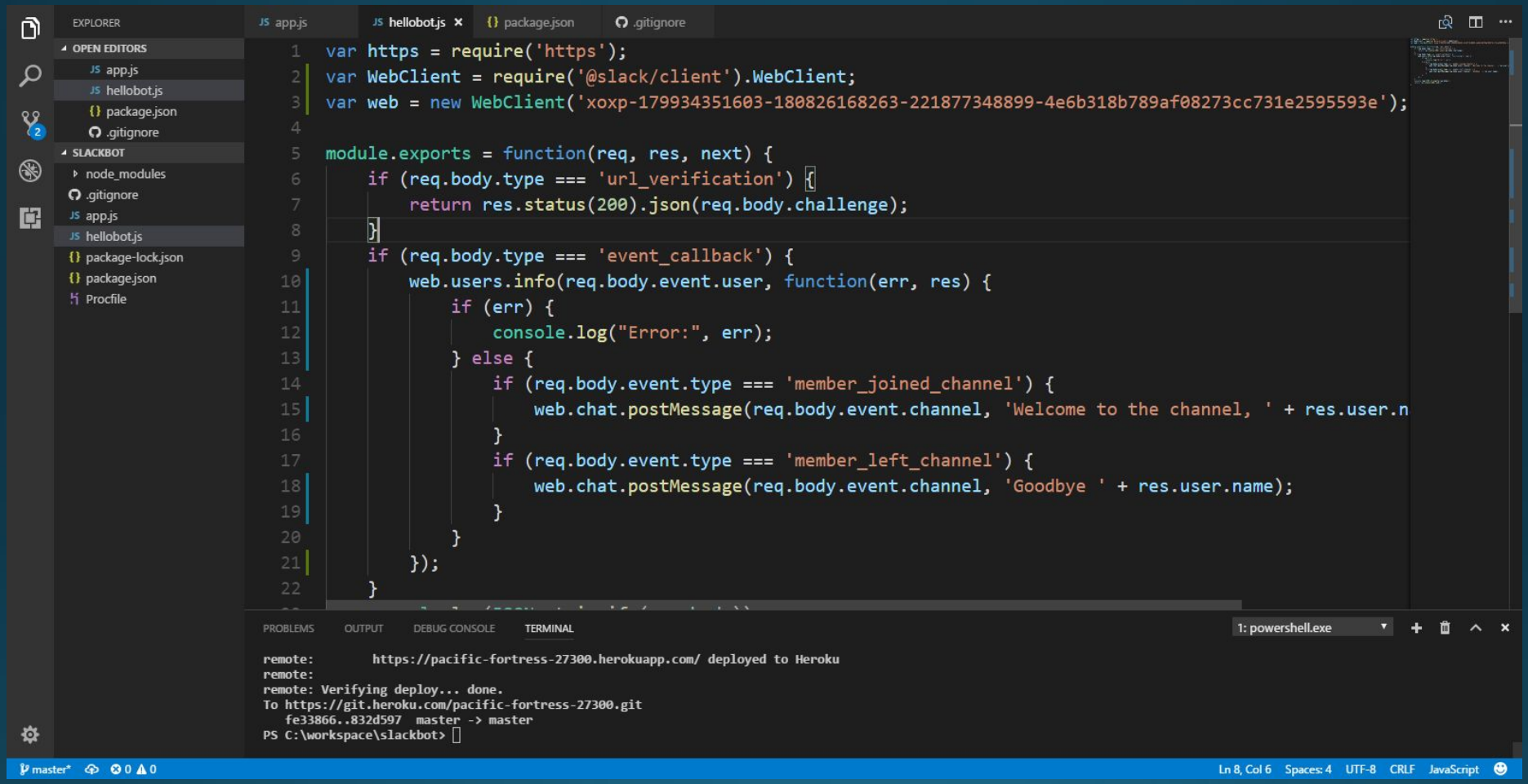

EXPLORER
OPEN EDITORS
app.js
hellobot.js
Procfile
.gitignore
SLACKBOT
node_modules
.gitignore
app.js
hellobot.js
package-lock.json
package.json
Procfile
app.js
hellobot.js
Procfile
.gitignore
1 module.exports = function(req, res, next) {
2 if (req.body.type === 'url_verification') {
3 return res.status(200).json(req.body.challenge);
4 }
5 console.log(JSON.stringify(req.body));
6 return res.status(200).end();
7 }
PROBLEMS
OUTPUT
DEBUG CONSOLE
TERMINAL
1: powershell.exe
remote: -----> Restoring cache
remote: Loading 2 from cacheDirectories (default):
remote: - node_modules
remote: - bower_components (not cached - skipping)
remote:
remote: -----> Building dependencies
remote: Installing node modules (package.json + package-lock)
remote: up to date in 0.568s
remote:
remote: -----> Caching build
remote: Clearing previous node cache
remote: Saving 2 cacheDirectories (default):
remote: - node_modules
remote: - bower_components (nothing to cache)
remote:
remote: -----> Build succeeded!
remote: -----> Discovering process types
remote: Procfile declares types -> web
remote:
remote: -----> Compressing...
remote: Done: 15.9M
remote: -----> Launching...
remote: Released v4
remote: https://pacific-fortress-27300.herokuapp.com/ deployed to Heroku
remote:
remote: Verifying deploy... done.
To https://git.heroku.com/pacific-fortress-27300.git
e12e2f6..984ed5d master -> master
PS C:\workspace\slackbot>
master
0 0
Ln 4, Col 6
Spaces: 4
UTF-8
CRLF
JavaScript


EXPLORER
OPEN EDITORS
app.js
hellobot.js
Procfile
.gitignore
SLACKBOT
node_modules
.gitignore
app.js
hellobot.js
package-lock.json
package.json
Procfile
app.js
hellobot.js
Procfile
.gitignore
1 module.exports = function(req, res, next) {
2 if (req.body.type === 'url_verification') {
3 return res.status(200).json(req.body.challenge);
4 }
5 console.log(JSON.stringify(req.body));
6 return res.status(200).end();
7 }
PROBLEMS
OUTPUT
DEBUG CONSOLE
TERMINAL
1: powershell.exe
2017-08-04T04:27:37.000000+00:00 app[api]: Build started by user heroku@bricemciver.com
2017-08-04T04:28:04.984137+00:00 app[api]: Deploy 984ed5d2 by user heroku@bricemciver.com
2017-08-04T04:28:04.984137+00:00 app[api]: Release v4 created by user heroku@bricemciver.com
2017-08-04T04:28:05.235213+00:00 heroku[web.1]: Restarting
2017-08-04T04:28:05.236006+00:00 heroku[web.1]: State changed from up to starting
2017-08-04T04:28:05.718539+00:00 heroku[web.1]: Stopping all processes with SIGTERM
2017-08-04T04:28:05.821370+00:00 heroku[web.1]: Process exited with status 143
2017-08-04T04:27:37.000000+00:00 app[api]: Build succeeded
2017-08-04T04:28:06.708324+00:00 heroku[web.1]: Starting process with command `node app`
2017-08-04T04:28:08.739910+00:00 app[web.1]: Slack bot listening on port 51617
2017-08-04T04:28:10.338917+00:00 heroku[web.1]: State changed from starting to up
2017-08-04T04:31:56.698710+00:00 heroku[router]: at=info method=POST path="/hello" host=pacific-fortress-27300.herokuapp.com request_id=4f4a1456-c69a-4afe-a388-2d81e58b3112 fwd="54.89.92.4" dyno=web.1 connect=0ms service=50ms status=200 bytes=261 protocol=https
2017-08-04T04:35:13.823386+00:00 heroku[router]: at=info method=POST path="/hello" host=pacific-fortress-27300.herokuapp.com request_id=7f2f45a6-e80b-4d12-8888-2d6527bb0abb fwd="54.174.33.17" dyno=web.1 connect=0ms service=6ms status=200 bytes=117 protocol=https
2017-08-04T04:35:13.827212+00:00 app[web.1]: {"token":"O9x6jsuiYsQhZ5DI0WvyADyp","team_id":"T59TGABHR","api_app_id":"A6H8R2H1N","event":{"type":"member_left_channel","user":"U5AQA4Y7R","channel":"C6J2EEW5T","channel_type":"C","event_ts":"1501821313.871105"},"type":"event_callback","authed_users":["U5AQA4Y7R"],"event_id":"Ev6K5T6P3R","event_time":1501821313}
2017-08-04T04:35:25.304127+00:00 heroku[router]: at=info method=POST path="/hello" host=pacific-fortress-27300.herokuapp.com request_id=a31b40cf-8e63-41a2-af66-00ad9582bdcb fwd="54.174.33.17" dyno=web.1 connect=0ms service=3ms status=200 bytes=117 protocol=https
2017-08-04T04:35:25.307879+00:00 app[web.1]: {"token":"O9x6jsuiYsQhZ5DI0WvyADyp","team_id":"T59TGABHR","api_app_id":"A6H8R2H1N","event":{"type":"member_joined_channel","user":"U5AQA4Y7R","channel":"C6J2EEW5T","channel_type":"C","event_ts":"1501821324.872866"},"type":"event_callback","authed_users":["U5AQA4Y7R"],"event_id":"Ev6HGMPCMP","event_time":1501821324}
PS C:\workspace\slackbot>
master
0 0
Ln 4, Col 6
Spaces: 4
UTF-8
CRLF
JavaScript


EXPLORER
app.js
hellobot.js
Procfile
.gitignore
OPEN EDITORS
app.js
hellobot.js
Procfile
.gitignore
SLACKBOT
node_modules
.gitignore
app.js
hellobot.js
package-lock.json
package.json
Procfile
var https = require('https');
module.exports = function(req, res, next) {
if (req.body.type === 'url_verification') {
return res.status(200).json(req.body.challenge);
}
if (req.body.type === 'event_callback') {
var postReq = https.request({
method: 'POST',
headers: {
'Content-Type': 'application/json'
},
host: 'hooks.slack.com',
path: '/services/T59TGABHR/B6HTY9RJ6/2n9dX062QSgWvMp8gAP4
});
if (req.body.event.type === 'member_joined_channel') {
postReq.write(JSON.stringify({'text':'Welcome to the char
postReq.end();
}
if (req.body.event.type === 'member_left_channel') {
postReq.write(JSON.stringify({'text':'Goodbye ' + req.boc
postReq.end();
}
}
console.log(JSON.stringify(req.body));
return res.status(200).end();
}
master*
0 0
Ln 23, Col 10
Spaces: 4
UTF-8
CRLF
JavaScript


McIver Family
bricem
All Threads
CHANNELS
general
helloworld
random
DIRECT MESSAGES
slackbot
bricem (you)
+ Invite people
APPS
#helloworld
1 | 0 | Add a topic
Search
Today
bricem 3:25 PM
joined #helloworld
bricem 3:27 PM
added an integration to this channel: HelloWorldKCDC
HelloWorldKCDC APP 3:36 PM
Welcome to the conference!
bricem 4:17 PM
added an integration to this channel: HelloWorldKCDC
bricem 11:33 PM
added an integration to this channel: HelloWorldKCDC
bricem 11:35 PM
joined and left #helloworld
HelloWorldKCDC APP 11:54 PM
Goodbye U5AQA4Y7R
new messages
bricem 11:54 PM
joined #helloworld
HelloWorldKCDC APP 11:54 PM
Welcome to the channel, U5AQA4Y7R
Message #helloworld

Slack Developer Kit


EXPLORER
app.js
hellobot.js
package.json
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hellobot.js
package.json
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SLACKBOT
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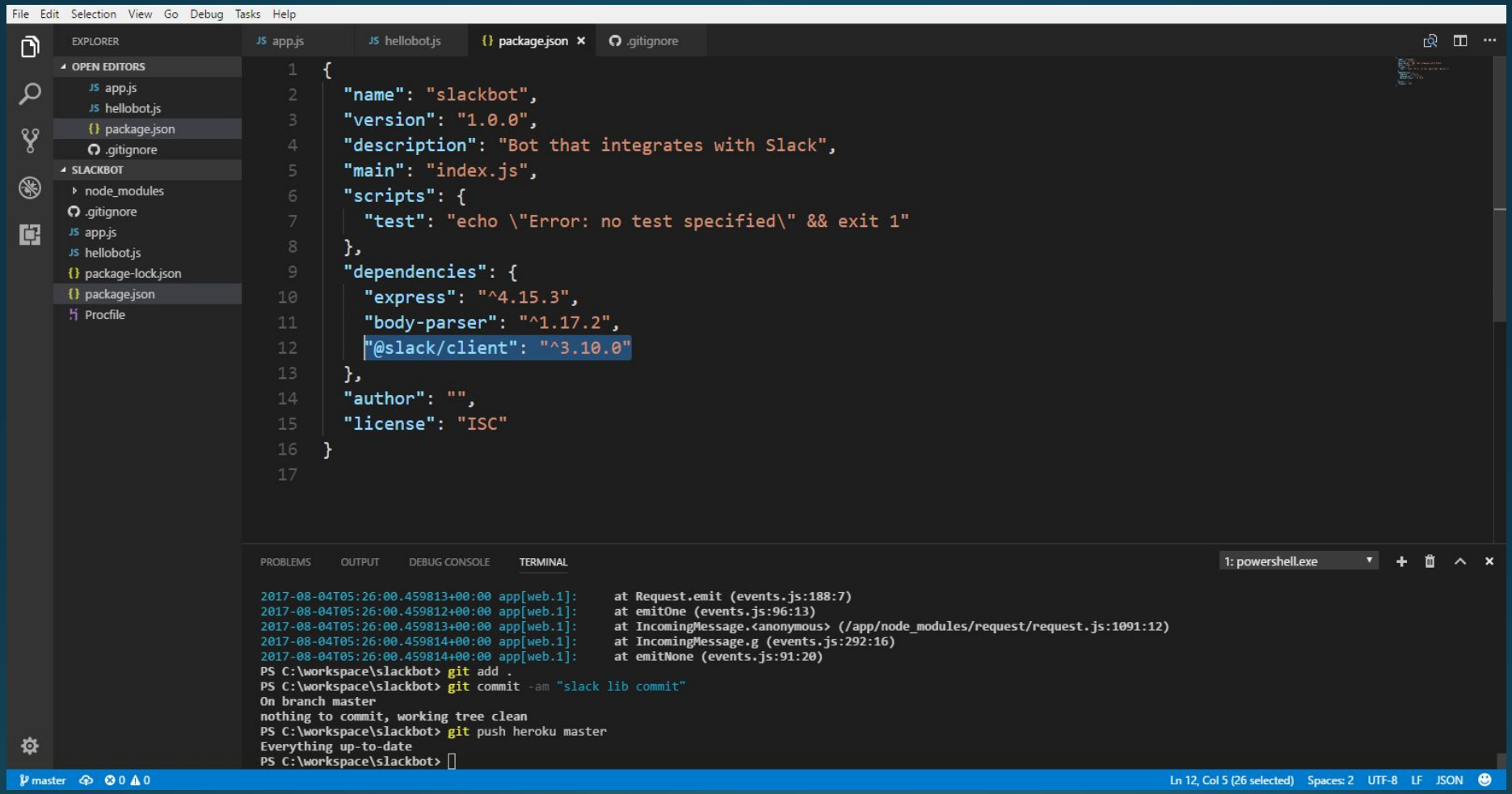
app.js
hellobot.js
package-lock.json
package.json
Procfile
var https = require('https');
var WebClient = require('@slack/client').WebClient;
var web = new WebClient('xoxp-179934351603-180826168263-221877348899-4e6b318b789af08273cc731e2595593e');
module.exports = function(req, res, next) {
if (req.body.type === 'url_verification') {
return res.status(200).json(req.body.challenge);
}
if (req.body.type === 'event_callback') {
web.users.info(req.body.event.user, function(err, res) {
if (err) {
console.log("Error:", err);
} else {
if (req.body.event.type === 'member_joined_channel') {
web.chat.postMessage(req.body.event.channel, 'Welcome to the channel, ' + res.user.n
}
if (req.body.event.type === 'member_left_channel') {
web.chat.postMessage(req.body.event.channel, 'Goodbye ' + res.user.name);
}
}
});
}
PROBLEMS
OUTPUT
DEBUG CONSOLE
TERMINAL
1: powershell.exe
remote: https://pacific-fortress-27300.herokuapp.com/ deployed to Heroku
remote:
remote: Verifying deploy... done.
To https://git.heroku.com/pacific-fortress-27300.git
fe33866..832d597 master -> master
PS C:\workspace\slackbot>
master*
Ln 8, Col 6
Spaces: 4
UTF-8
CRLF
JavaScript


File Edit Selection View Go Debug Tasks Help
EXPLORER
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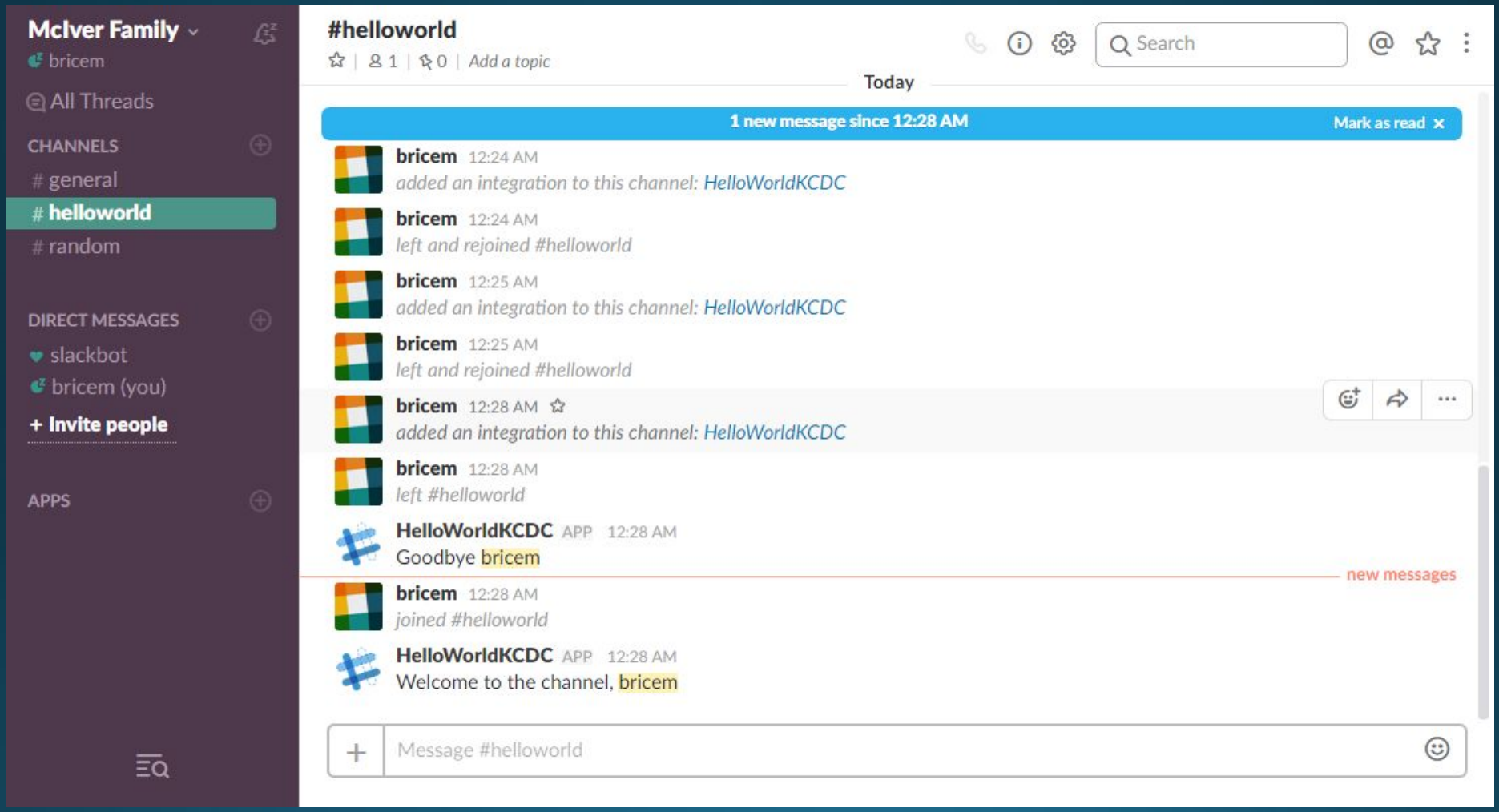
SLACKBOT
node_modules
.gitignore
app.js
hellobot.js
package-lock.json
package.json
Procfile
{
"name": "slackbot",
"version": "1.0.0",
"description": "Bot that integrates with Slack",
"main": "index.js",
"scripts": {
"test": "echo \"Error: no test specified\" && exit 1"
},
"dependencies": {
"express": "^4.15.3",
"body-parser": "^1.17.2",
"@slack/client": "^3.10.0"
},
"author": "",
"license": "ISC"
}
PROBLEMS
OUTPUT
DEBUG CONSOLE
TERMINAL
1: powershell.exe
2017-08-04T05:26:00.459813+00:00 app[web.1]: at Request.emit (events.js:188:7)
2017-08-04T05:26:00.459812+00:00 app[web.1]: at emitOne (events.js:96:13)
2017-08-04T05:26:00.459813+00:00 app[web.1]: at IncomingMessage.<anonymous> (/app/node_modules/request/request.js:1091:12)
2017-08-04T05:26:00.459814+00:00 app[web.1]: at IncomingMessage.g (events.js:292:16)
2017-08-04T05:26:00.459814+00:00 app[web.1]: at emitNone (events.js:91:20)
PS C:\workspace\slackbot> git add .
PS C:\workspace\slackbot> git commit -am "slack lib commit"
On branch master
nothing to commit, working tree clean
PS C:\workspace\slackbot> git push heroku master
Everything up-to-date
PS C:\workspace\slackbot>
master
Ln 12, Col 5 (26 selected)
Spaces: 2
UTF-8
LF
JSON


McIver Family
bricem
All Threads
CHANNELS
general
helloworld
random
DIRECT MESSAGES
slackbot
bricem (you)
+ Invite people
APPS
#helloworld
1 | 0 | Add a topic
Search
Today
1 new message since 12:28 AM
Mark as read
bricem 12:24 AM
added an integration to this channel: HelloWorldKCDC
bricem 12:24 AM
left and rejoined #helloworld
bricem 12:25 AM
added an integration to this channel: HelloWorldKCDC
bricem 12:25 AM
left and rejoined #helloworld
bricem 12:28 AM
added an integration to this channel: HelloWorldKCDC
bricem 12:28 AM
left #helloworld
HelloWorldKCDC APP 12:28 AM
Goodbye bricem
new messages
bricem 12:28 AM
joined #helloworld
HelloWorldKCDC APP 12:28 AM
Welcome to the channel, bricem
Message #helloworld

Easier Solutions

Bot Libraries

- Howdy's BotKit
- Microsoft Bot Framework
- Gupshup
- API.AI
- Wit.ai

Visual-based

- TextIt
- Sonar
- Smooch
- Telegram

Summary

- Incoming Webhooks
  - Simple to set up and a quick win for messaging needs
- Event subscriptions
  - More advanced functionality
- Unless you’re sure that Slack is the only platform you want to support, use a library that supports multiple platforms