



New Releases Notifier #2

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Growth Session #22 - February 15 2019



Recap

-  Crawl new versions of libraries on the Google Maven server:

<https://dl.google.com/dl/android/maven2/index.html>

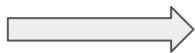
-  Create a cron job for the crawling tool
-  Build a Slack plugin to send new release notifications to our Slack channel

Build with Cron

- Install Cron to the project with NPM.
- Setup the Cron task with a schedule.



```
npm install cron
```



```
var CronJob = require('cron').CronJob;  
  
new CronJob('* * * * *', function() {  
  console.log('You will see this message every second');  
});
```

Build with Cron

- └─ config
 - { } config.json
- └─ migrations
- └─ models
 - JS component.js
 - JS index.js
 - JS version.js
- └─ node_modules
- └─ public
- └─ routes
 - JS index.js
 - JS users.js
- └─ services
 - JS cron.js
 - JS scrape.js
 - JS slack.js
- └─ views
- ⚙ .editorconfig
- 📄 .gitignore
- JS app.js
- 📄 deploy_heroku.sh
- 📄 LICENSE
- 📄 local_deploy.sh
- { } package-lock.json
- { } package.json
- 📖 README.md

// app.js

```
const cronServices = require('./services/cron');  
const scrapeService = require('./services/scrape');
```

```
cronServices.startCron(function() {  
  scrapeService.startScrape();  
});
```

Build with Cron

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```
// services/cron.js

'use strict';

const env = process.env.NODE_ENV || 'development';
const config = require('../config/config.json')[env];
const CronJob = require('cron').CronJob;

function startCron(callback) {
  if(config.cron.enable) {
    const job = new CronJob(config.cron.schedule, function() {
      console.log('\n#####');
      console.log('#####      Start Cron      #####');
      console.log('#####\n');

      callback();
    });

    job.start();
  }
}

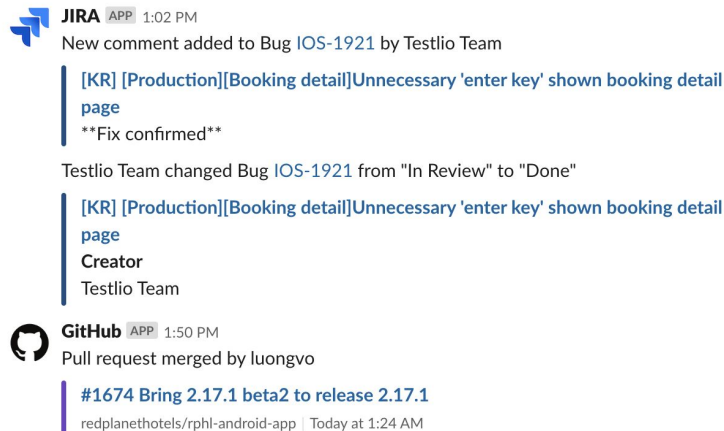
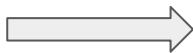
//
module.exports = {
  startCron: startCron
}
```

```
// config/config.json

{
  "production": {
    "cron": {
      "enable": false,
      "schedule": "0 */3 * * * *"
    }
  }
}
```

Build Slack app

- Slack app?
- How can we send a message from our backend into our Slack workspace channels?



- Incoming Webhooks vs Web API 🤔

Build Slack app

- Create a Slack app from https://api.slack.com/apps?new_app=1
- Add features and functionality: *Incoming Webhooks*
 - Dev: [#slack-apps-testing](#)
 - Prod: [#new-releases-activity](#)



```
curl -X POST -H 'Content-type: application/json' --data '{"text":"Hello, World!"}'  
https://hooks.slack.com/services/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
```



new-releases-notifier APP 4:39 PM

Hello, World!

- Configure permissions: *chat:write:bot*

Build Slack app

- Call webhook request whenever a new release is detected by cron
- Formatting slack message by

<https://api.slack.com/docs/message-formatting>

- Add hyperlink in slack message to open google search for that library and version (*while waiting for the release note feature added*) 🤪 e.g.

[https://www.google.com/search?as_q=com.android.support:drawer layout:28.0.0-rc02%20release%20notes%20site:developer.android.com](https://www.google.com/search?as_q=com.android.support:drawer%20layout:28.0.0-rc02%20release%20notes%20site:developer.android.com)

Conclusion

- Cron job is running every 3 mins for new release checking (*will be per day after demonstration :troll:*)
- Whenever a new release is detected, a slack notification will be sent to:

[#new-releases-activity](#)



NewReleases APP 7:02 AM
appium/appium on GitHub
v1.11.1-rc.1



NewReleases APP 1:11 PM
flutter/flutter on GitHub
v1.2.1



luongvo 2:26 PM
added an integration to this channel: [new-releases-notifier](#)



new-releases-notifier APP 2:30 PM
abc.xyz
1.0.0



new-releases-notifier APP 4:18 PM
com.android.databinding:library
3.5.0-alpha04



new-releases-notifier APP 4:26 PM
com.android.support:drawerlayout
28.0.0-rc02

Next Steps

- Migrate the current webhook incoming messages to the Web API <https://api.slack.com/web> and use the postMessage method instead <https://api.slack.com/methods/chat.postMessage>
- Create a website to display the cron status.
- Try to fetch the release note from the Google official sites and display the release note in the Slack message.

Thanks!

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