[SOT101]
How can you contribute to ui5-tooling?

SAP Online Track May 2020

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Agenda

1. General concept & custom extension ideas
2. Development
3. Testing
4. Publish

What is UI5 Tooling?

"a modern CLI-based development experience"

Volker Buzek has a session today! **[SOT309]**

Peter Muessig's community call:

https://blogs.sap.com/2020/04/07/ui5-tooling-a-modern-development-experience-for-ui5/

Ideas

- Look at your workflow
  - missing tools
  - repetitive manual tasks!
- Current UI5 tooling extensions
- Get inspired by other frameworks!

Current Tasks

NPM package	Description
ui5-task-i18ncheck	checks for missing i18n texts
ui5-task-pwa-enabler	enables ui5 app with pwa functionalities
ui5-task-stringreplacer	replaces placeholder strings
ui5-task-transpile	transpile es6 to es5 code
ui5-task-zipper	bundle the entire webapp in a zip-archive

Current Middlewares

NPM package	Description
ui5-middleware-cfdestination	use the approuter as proxy
ui5-middleware-iasync	sync UI interactions across connected browsers (alpha! careful!)
ui5-middleware-index	serve an HTML file for / (root)
ui5-middleware-livereload	usage of livereload for development
ui5-middleware-livetranspile	on-demand es6 to es5 transpile when requesting js
ui5-middleware-simpleproxy	simple express proxy
ui5-middleware-servestatic	serve static resources

Naming and Config Design

Package name?

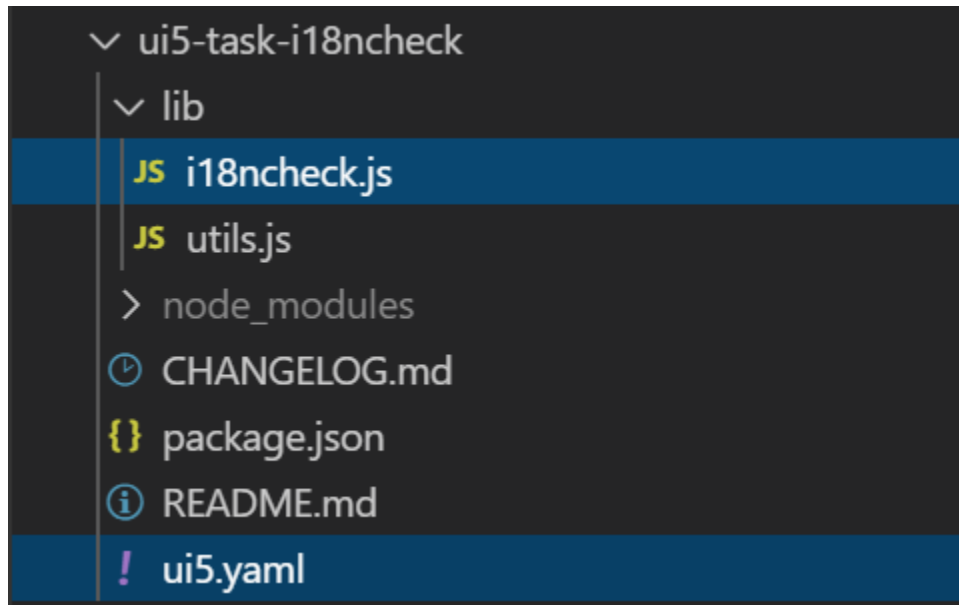```
packages > ui5-middleware-livereload > ! ui5.yaml
  1   # https://sap.github.io/ui5-tooling
  2   specVersion: '1.0'
  3   metadata:
  4   name: ui5-middleware-livereload
  5   kind: extension
  6   type: server-middleware
  7   middleware:
  8   path: lib/livereload.js
  9
```

## How it should be used?

```
29   server:
30   customMiddleware:
31   - name: ui5-middleware-livereload
32   afterMiddleware: compression
33   configuration:
34   debug: true
35   ext: "xml,json,properties"
36   port: 35729
37   path: "webapp"
```
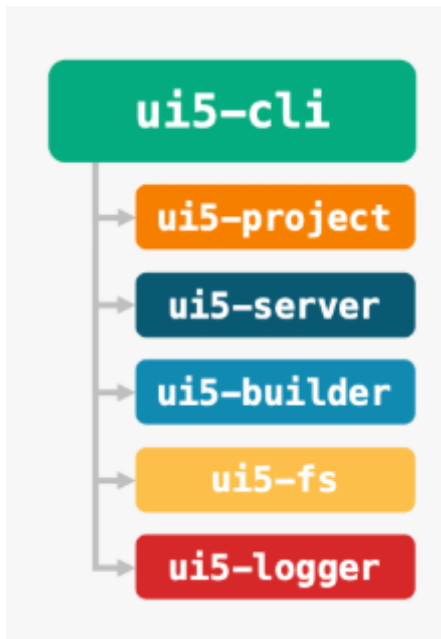
# Development

## Example task

# Entry function

```
1    const utils = require("./utils");
2    const log = require("@ui5/logger").getLogger("builder:customtask:i18ncheck");
3
4    module.exports = async function ({ workspace, dependencies, options }) {
5
6
7        let propertyFilesP = workspace.byGlob(['**/i18n*.properties', '!**/node_modules/**'])
8        let xmlviewFilesP = workspace.byGlob(['**/*.view.xml', '!**/node_modules/**']);
```

Refer to UI5 tooling and docs!

- github.com/SAP/ui5-tooling

Workspace object

- Workspace is a "DuplexCollection" in ui5-fs

- workspace.byGlob()
- resource.getPath()
- resource.getString()

@ui5/fs

Classes

AbstractReader
AbstractReaderWriter
DuplexCollection
ReaderCollection
ReaderCollectionPrioritized
Resource

Options object

- Based on your configuration design

```
let xmlviewFileContentsP = []
for (let resource of xmlviewFiles) {
    let asyncWorkForContent = async () => {
        options.configuration && options.configuration.debug && log.info(`Reading XML view:
        let fileContent = await resource.getString();
        return utils.readI18nUsageFromXML(fileContent, resource.getPath());
    }
    xmlviewFileContentsP.push(asyncWorkForContent());
}
```
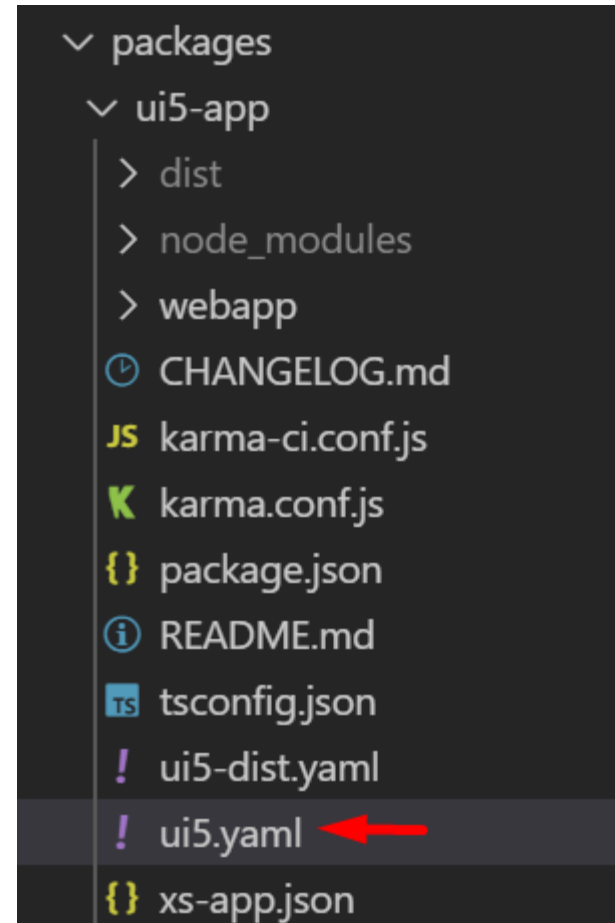
Lerna

- Supports workspaces
- Ensures all libraries are compatible

Code conventions

- ES6 style Javascript
  - use let
  - arrow functions
  - await/promise based async code
- Catch exceptions
- Use @ui5/logger

Testing

- Use ui5-app in the repo
- Add your task/middleware

- For task
  - yarn build

- For middleware
  - yarn dev

Publish

Two options:

- Create your own repo and publish to npm
- Pull request to the community repo

Community Repository

Advantages

- Your package will be checked for compatibility in the future
- Peter & Volker do great reviews!

github.com/petermuessig/ui5-ecosystem-showcase

npm package naming convention

npm   Q ui5-task-*   **Search**

ui5-task-i18ncheck

Task for the UI5 tooling to check missing translations in i18n properties used in XML views.

pmuessig published 0.3.0 • 6 days ago

ui5-task-pwa-enabler

UI5 task to make a PWA out of a UI5 application.

pmuessig published 0.2.1 • 3 days ago

ui5-task-nwabap-deployer

UI5 Tooling Task for deploying UI5 sources to a SAP NetWeaver ABAP system

pfefferf published 1.0.12 • a month ago

Thanks for listening!

Special thanks to SAP Online Track organizers!

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