

Front-end Development with aemfed

Objectives:

- Describe benefits of aemfed
- Install aemfed
- Develop using aemfed



Node.js® and NPM

Node.js

- Asynchronous event driven JavaScript runtime
- Built on Chrome V8 JavaScript engine



Node Package Manager (NPM)

- CLI package manager
- Manages an online repository of open source node.js packages
- Manages dependencies for Node.js packages

aemfed

Open-source, command-line tool used to speed up front-end development

- URL to the open source project - <https://aemfed.io/>

It is powered by

- aemsync
- Browsersync
- Sling Log Tracer

Why aemfd?

- Listens for file changes and, using *aemsync*, automatically syncs to an AEM instance
- Determines which clientlibs are affected by the uploaded changes
 - *Browsersync* communicates with all tabs of your browser that are open to AEM pages, without any browser plugins
 - Styling changes are immediately injected without a reload, maintaining the state of the page
 - All other changes, result in a page reload/refresh
- Works with the *Sling Log tracer* to automatically display any front-end related, server-side errors directly in the terminal window

Enabling the Apache Sling Log Tracer

Apache Sling Log Tracer

Provides support for enabling log for specific loggers on per request basis. Refer to <http://sling.apache.org/documentation/bundles/log-tracers.html> for more details

Tracer Sets

oak-query : org.apache.jackrabbit.oak.query.QueryEngineImpl;level=debug

oak-writes : org.apache.jackrabbit.oak.jcr.operations.writes;level=trace

Default list of tracer sets configured. Tracer Set config confirms to following format. <set name> : <logger name>;level=<level name>, other loggers (tracerSets)

Enabled

☒

Enable the Tracer (enabled)

Recording Servlet Enabled

☒

Enable the Tracer Servlet. This servlet is required for the tracer recording feature to work and provides access to the json dump of the recording performed (servletEnabled)

Recording Cache Size

50

Recording cache size in MB which would be used to temporary cache the recording data (recordingCacheSizeInMB)

Recording Cache Duration

900

Time in seconds upto which the recording data would be held in memory before expiry (recordingCacheDurationInSecs)

Compress Recording

☒

Enable compression for recoding held in memory (recordingCompressionEnabled)

GZip Response

☒

If enabled the response sent would be compressed (gzipResponse)

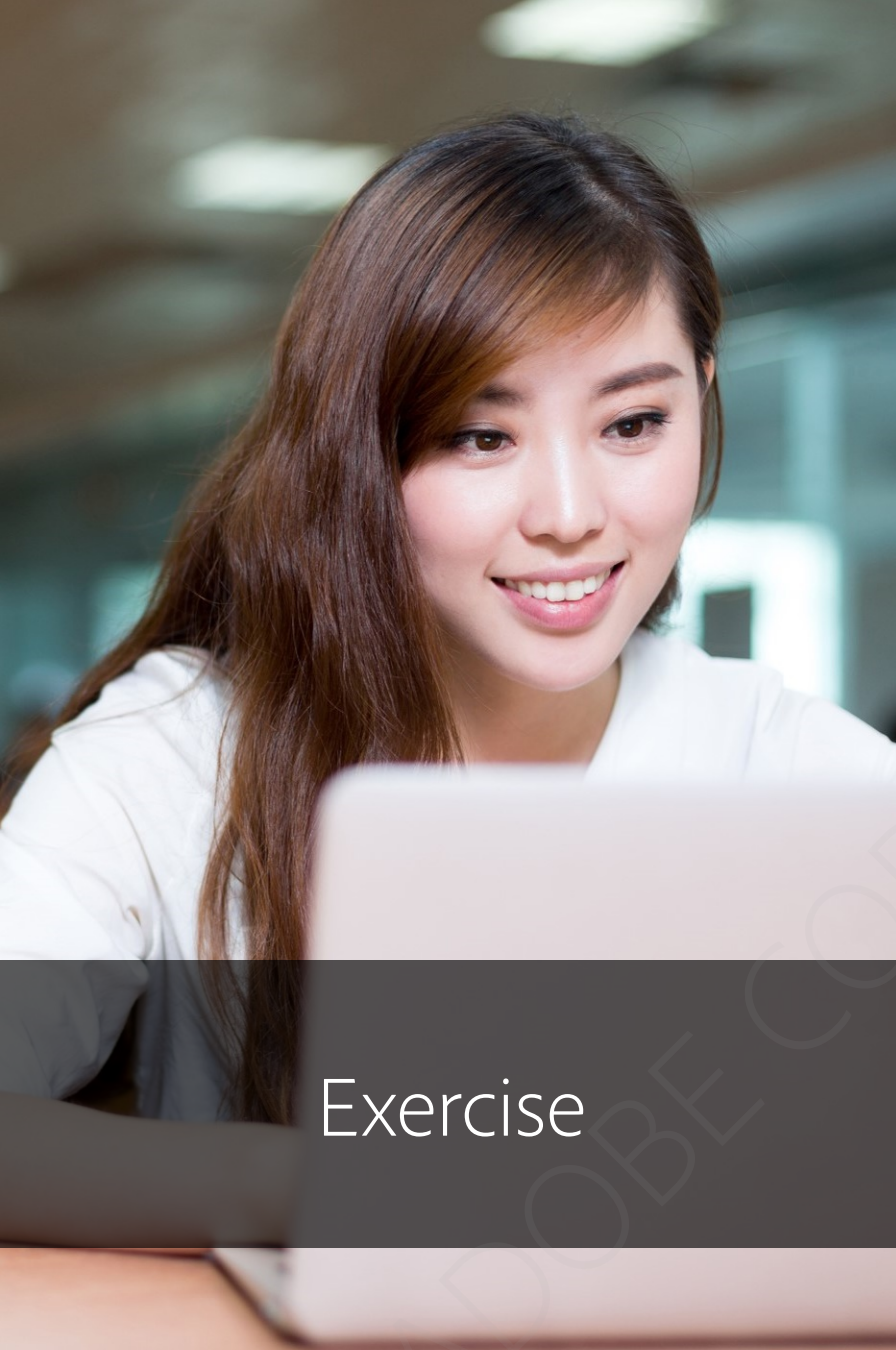
Configuration Information

Persistent Identity (PID)

org.apache.sling.tracer.internal.LogTracer

Configuration Binding

Unbound or new configuration



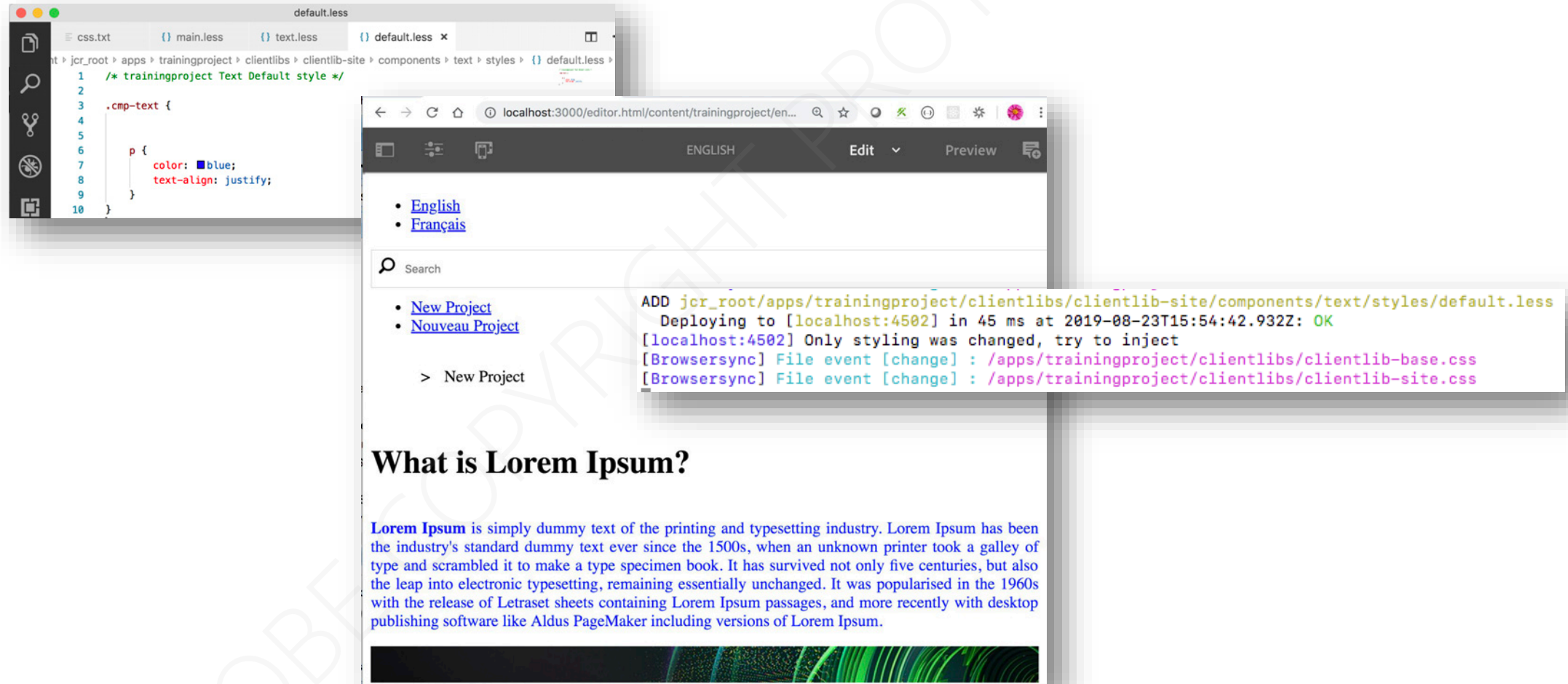
Exercise

Exercise 1 - Install Node.js and NPM

Exercise 2 – Configure and run aemfed

Exercise 3 – Install content locally (optional)

aemfd Watches File Changes



Apache Sling Log Tracer Displays Errors



The screenshot shows an IDE window with a file explorer on the left and a code editor. The file explorer shows a path: `jcr_root > apps > trainingproject > clientlibs > clientlib-site > components > text > styles > {} default.less`. The code editor shows the following Less code:

```
1  /* trainingproject Text Default style */
2
3  .cmp-text {
4
5
6      p {
7          color: green
8          text-align: justify;
9      }
10 }
```

```
[Browsersync] File event [change] : /apps/trainingproject/clientlibs/clientlib-base.css
[Browsersync] File event [change] : /apps/trainingproject/clientlibs/clientlib-site.css
[localhost:4502] Tracer output for [/etc.clientlibs/trainingproject/clientlibs/clientlib-base.css?browsersync=1566576729776] (daf7a936-ceca-43ac-ace6-8a7b02436c93)
[ERROR] LessCompilerImpl: failed to compile less /apps/trainingproject/clientlibs/clientlib-site/main.less: ParseError: Unrecognised input in /apps/trainingproject/clientlibs/clientlib-site/components/text/styles/default.less on line 6, column 5:
5
6     p {
7         color: green

Local source: /Adobe/Archetype19/training/ui.apps/src/main/content/jcr_root/apps/trainingproject/clientlibs/clientlib-site/components/text/styles/default.less:6:5
```



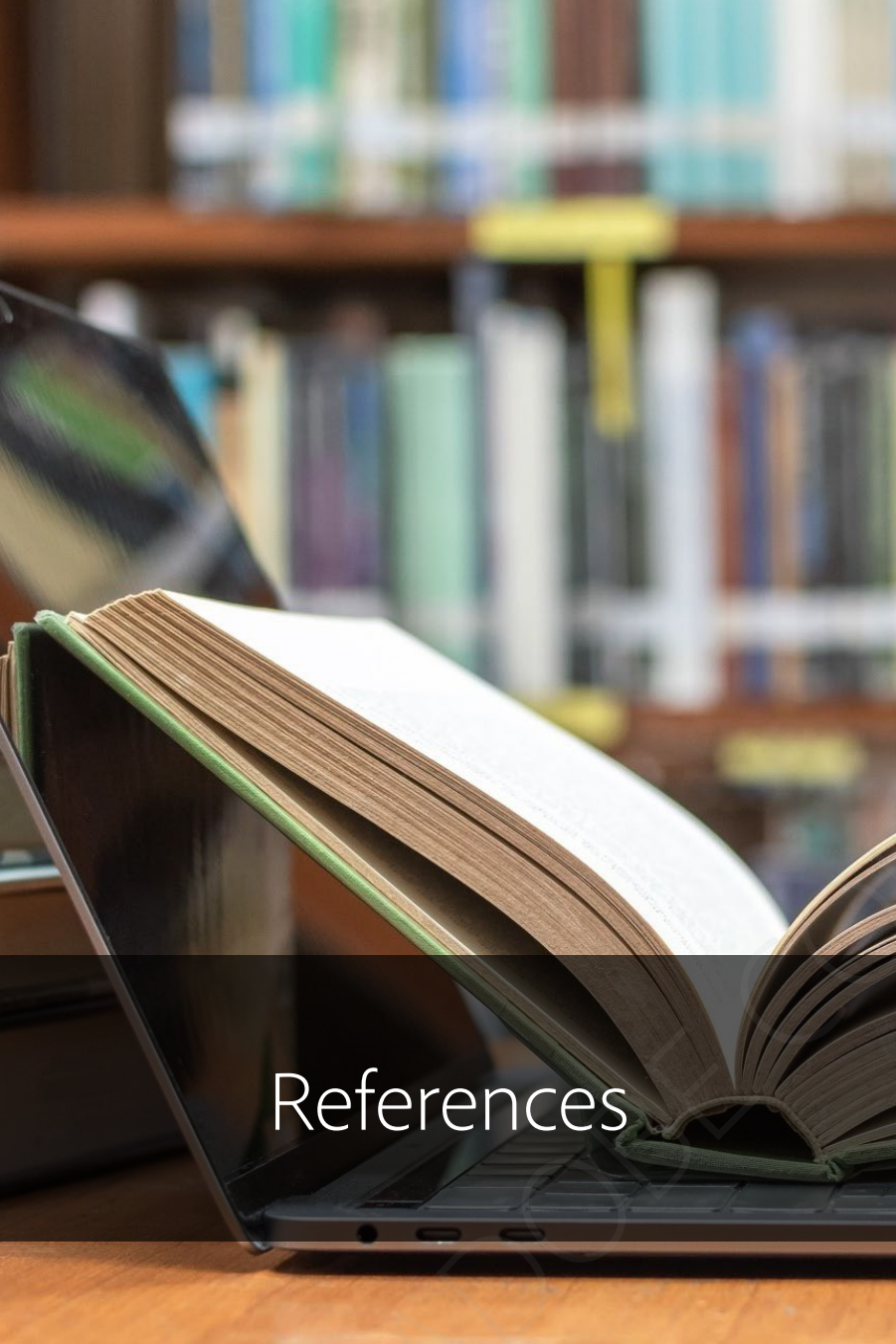

Exercise

Exercise 4: Add a component style using aemfed



Key Takeaways:

- Node.js
 - Enables developers to use JavaScript to write command line (CLI) tools and for server-side scripting
- aemfed
 - Open-source, command-line tool used to speed up front-end development
 - Listens for file changes and, using *aemsync*, automatically syncs to an AEM instance
 - Works with the *Sling Log tracer* to automatically display any front-end related, server-side errors directly in the terminal window



References

Resources:

- aemfed: <https://aemfed.io/>
- <https://github.com/abmaonline/aemfed>