Documentation

Beanframework

Thank you so much for using beanframework project. 100% open source project under MIT license.

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Github: Beanframework

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If you have any questions that are beyond the scope of this help file, Please feel free to post via Github Discussion Page .

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```
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```

Installation

Create a new database:

1. By default, this project supported unicode character such as Chinese language, therefore the database must use CHARACTER SET utf8 COLLATE utf8_unicode_ci

```
CREATE SCHEMA `beanframework` DEFAULT CHARACTER SET utf8 COLLATE utf8_unicode_ci
```

2. Configure project by copy and remove **.template** suffix:
   - `beanframework/bin/` pom.xml.template
   - `beanframework/bin/install/` server.bat.template
   - `beanframework/bin/install/` server.sh.template
   - `beanframework/bin/platform/` pom.xml.template
   - `beanframework/config/` pom.xml.template
   - `beanframework/config/src/main/resources/` *.template
   - `beanframework/config/src/main/resources/import/dev.template`

- Optional: `beanframework/bin/install/` app.xml.template

3. Open command prompt and navigate to `beanframework/bin` directory run:

```
mvnw clean install
```

4. Navigate to `beanframework/bin/install` directory and run:

```
server.bat
```

5. Access application endpoints:
   - Console: http://localhost:8080/console
   - Backoffice: http://localhost:8080/backoffice
   - Documentation: http://localhost:8080/documentation
6. Import update data:
   - Access Console: http://localhost:8080/console
   - Login with default admin account: username: **admin** , password: **admin**
   - Goto menu `Platform->Update` , check all and update.
7. You are good to go for run your project now!

Project Structure

1. Below is the `beanframework` folder structure:
   - `bin` - Source files
     - `custom` - Create a custom modules and put in this folder, best practice for not mixing with original project structure and codes, and easily to upgrade software in future.
     - `install` - Install/Run application manually or install as windows service.
     - `modules` - Project default modules.
     - `platform` - Platform that startup this application with configured modules.
   - `config` - Mainly use for application properties and configurations for different environments.
   - `data` - Data storage for this application
     - `media` - All the media stored in this directory.
     - `integration` - Spring Integration. Can be used for import data.
   - `log` - Application logging files, with archived and rotated logging files.
   - `temp` - Application temporary files.

Platform

Platform Configuration and Import Data

Configuration

`beanframework/bin/config/src/main/resources/`

- Configure environment:
  - `application.properties`
    - **spring.profiles.active=dev**
- Configure configurations and import data for environment:

- `application-dev.properties` - Environment properties.
- `ehcache-dev.xml` - Cache configuration.
- `logback-dev.xml` - Logback configuration.
- `import/dev` - Contains data to import

Import Data

`beanframework/bin/config/src/main/resources/import/`

- `dev/initdata/**/*.csv` - Contains data to import every time when application startup.
  - `module.imex.import.init.locations=classpath*:import/dev/initdata/**/*.csv`
- `dev/initsql/**/*.sql` - Contains sql to execute every time when application startup.
  - `platform.import.startup.enabled=true`
  - `platform.import.sql.locations=classpath*:import/dev/initsql/**/*.sql`
- `dev/updatedata` - Contains data to import when manually performing platform update.
  - `module.imex.import.update.locations=classpath*:import/dev/updatedata`

Development

Development for developer

Module Gen

`beanframework/bin/module/modulegen/`

- Set module configuration `src/main/resources/application.properties`
- Run `src/main/java/com/beanframework/modulegen/ModulegenApplication.java`
- Generated module output: `beanframework/bin/module/custom/`

Configure new module in project:

- Add new module in `beanframework/bin/pom.xml`
- Add new dependency in `beanframework/config/pom.xml`
- Add new profile and packages in `beanframework/config/src/main/resources/application.properties`
  - **spring.profiles.include=platform,console,backoffice,documentation,training**
  - **spring.scanBasePackages=com.beanframework,com.sample**
  - **jpa.domain.packagetoscans=com.beanframework.*.domain,com.sample.*.domain**

Dynamic Attributes

Optional: Please check example of dynamic attributes used in UserGroup module in project.

Example of create Dynamic Field for a Training Model:

- Create/Reuse a new entry in DynamicField **name_en**
- Create a new entry in DynamicFieldSlot **training_name_en**
- Create a new entry in DynamicFieldTemplate **training.dynamicfield.template**

Example of create Attributes for a Training model:

- `TrainingAttribute.java` - Create new entity
- `Training.java` - Insert attributes property
- `TrainingAttributeDto.java` - Insert attributes property

- `TrainingDto.java` - Insert attributes property
- `TrainingPopulator.java` - Insert attributes property
- `TrainingEntityConvTraining.java` - Insert attributes property
- `TrainingServiceImpl.java` - Create generateTrainingAttribute(...)
- `TrainingLoadInterceptor.java` - Insert trainingService.generateTrainingAttribute(...)
- `TrainingInitialDefaultsInterceptor.java` - Insert trainingService.generateTrainingAttribute(...)
- `trainingForm.html` - Insert:

```
...

<li class="nav-item">
        <a class="nav-link" id="custom-tabs-attribute-tab" data-toggle="pill" href="#custom-tabs-attribute"
role="tab" aria-controls="custom-tabs-attribute" aria-selected="false" th:text="#{module.common.attribute}"></a>
</li>

...

<div class="tab-pane fade" id="custom-tabs-attribute" role="tabpanel" aria-labelledby="custom-tabs-attribute-
tab">
        <th:block th:insert="~{backoffice/adminlte/common/fragment/content-form-attribute :: form(attributes=*
{attributes})}"></th:block>
</div>

...
```