

There following questions and steps are to help you plan and develop a plugin to fulfill a custom requirement.

- 1.
- 2.
- 3.
- 4.
- 5. / API
- 6.
- 7. |
 - a.
 - b.
 - c.
 - d. i18n
 - f.
- 8.

1.

Joget WorkflowMarketplace

1PDF

2

3

2.

Joget Workflow

1DataList ActionPDF

2

3Bean ShellHash Variable

3.

/;

1PDFDataList Action

- a. IDPDF
- b. IDdataListid
- c. PDF
- d. PDF

2Gantt Chat Userview

- a. DataList BinderdataList binder
- b.
- c.

3Hash VariableBean Shell Hash VariableBean Shell

e.g.g. #beanshell.EnvironmentVariableKey

URL

beanshell.EnvironmentVariableKey [name=Joget&email=info@joget.org&message= {form.sample.messageurl}]

4.

1PDFDataList ActiondataListPDFPDF

PDFzip

2

3Bean Shell Hash VariableHashBean Shell

5. / API

/Joget

[JSON API](#) [Javascript API](#) [Bean Shell/](#)

1PDFDataList ActionFormPdfUtil PDFDataList Form Data Action Action FormPdfUtil

2Userview MenuFreeMaker

3Bean Shell Hash VariableHash VariableBean ShellBean ShellBean Shell Form BinderBean Shell

6.

a. [Joget](#). "wflow-plugin-archetype" maven

b. maven

"C:"

jogetDependencyVersion ".m2"

C:\Users\m2\repository\org\joget\wflow-core*5.0.1*

- [Run the following for Window](#)

```
"C:\Joget Source Code\wflow-plugin-archetype\create-plugin.bat" packageName pluginFolderName  
jogetDependencyVersion
```

- [Run the following for Linux or Mac](#)

```
/joget_src/wflow-plugin-archetype/create-plugin.sh packageName pluginFolderName jogetDependencyVersion
```

- Sample Screenshot in Mac:

```
Owens-MacBook-Pro:plugins owen$ ~/joget/jw-community/branches/5.0-SNAPSHOT/wflow-plugin-archetype/create-plugin.sh org.joget.sample sample-plugins 5.0

[INFO] Scanning for projects...
[INFO] -----
[INFO] Building Maven Stub Project (No POM) 1
[INFO] -----
[INFO]
[INFO] >>> maven-archetype-plugin:2.1:generate (default-cli) > generate-sources @ standalone-pom >>>
[INFO]
[INFO] <<< maven-archetype-plugin:2.1:generate (default-cli) < generate-sources @ standalone-pom <<<
[INFO]
[INFO] --- maven-archetype-plugin:2.1:generate (default-cli) @ standalone-pom ---
[INFO] Generating project in Interactive mode
[WARNING] Archetype not found in any catalog. Falling back to central repository (http://repo1.maven.org/maven2).
[WARNING] Use -DarchetypeRepository=<your repository> if archetype's repository is elsewhere.
Downloading: http://dev.joget.org/archiva/repository/snapshots/org/joget/wflow-plugin-archetype/5.0-SNAPSHOT/maven-metadata.xml
Downloading: http://repo1.maven.org/maven2/org/joget/wflow-plugin-archetype/5.0-SNAPSHOT/maven-metadata.xml
[INFO] Using property: groupId = org.joget.sample
[INFO] Using property: artifactId = sample-plugins
Define value for property 'version': 1.0-SNAPSHOT: : 1.0.0
[INFO] Using property: package = org.joget.sample
Confirm properties configuration:
groupId: org.joget.sample
artifactId: sample-plugins
version: 1.0.0
package: org.joget.sample
Y: : y
[INFO] -----
[INFO] Using following parameters for creating project from Old (1.x) Archetype: wflow-plugin-archetype:5.0-SNAPSHOT
[INFO] -----
[INFO] Parameter: groupId, Value: org.joget.sample
[INFO] Parameter: packageName, Value: org.joget.sample
[INFO] Parameter: package, Value: org.joget.sample
[INFO] Parameter: artifactId, Value: sample-plugins
[INFO] Parameter: basedir, Value: /Users/owen/joget/plugins
[INFO] Parameter: version, Value: 1.0.0
[INFO] project created from Old (1.x) Archetype in dir: /Users/owen/joget/plugins/sample-plugins
[INFO] -----
[INFO] BUILD SUCCESS
[INFO] -----
[INFO] Total time: 51.623 s
[INFO] Finished at: 2015-09-08T23:38:32+08:00
[INFO] Final Memory: 13M/245M
[INFO] -----
Owens-MacBook-Pro:plugins owen$
```

c. Open/Import the maven project with your favorite IDE. Joget team recommends [NetBeans](#) IDE.

7.!

a.

Refer to the document of the plugin type listed in [Plugin Types](#). Find the abstract class and interface that need to be extended and implemented by your plugin.

Example: To develop a [Userview Menu](#) plugin, the plugin class need to extends the `org.joget.apps.userview.model.UserviewMenu` abstract class.

b.

[Userview](#)

- getCategory
- getClassName
- getDecoratedMenu
- getDescription
- getIcon
- getLabel
- getName
- getPropertyOptions
- getRenderPage
- getVersion
- isHomePageSupported

c.

The generated plugin folder by "wflow-plugin-archetype" module is a maven project. So, we will using the [Dependency Mechanism](#) provided by [Maven](#).

d. i18n

- i18n

- “[Plugin project directory] / src / main / resources / message”

“GanttChartMenu” “[Plugin project directory] / src / main / resources / message” “GanttChartMenu.properties”

GanttChartMenu.properties

```
org.joget.sample.GanttChartMenu.pluginLabel=Gantt Chart
org.joget.sample.GanttChartMenu.pluginDesc=To display form data in Gantt Chart layout
userview.ganttChart.label.title=Title
userview.ganttChart.label.week=Week
```

- [PluginManagerAppPluginUtil](#) getMessageString keyString pluginNameString translationPath i18n

getLabelgetDescriptiongetMessagei18n

```
public String getLabel() {
    return AppPluginUtil.getMessage("org.joget.sample.GanttChartMenu.pluginLabel", getClassName(),
    "message/GanttChartMenu");
}
public String getDescription() {
    return AppPluginUtil.getMessage("org.joget.sample.GanttChartMenu.pluginDesc", getClassName(),
    "message/GanttChartMenu");
}
```

- [readPluginResource](#)(String pluginName, String resourceUrl, Object[] arguments, boolean removeNewLines, String translationFileName) [AppUtil](#)i18n “JSON” @@ message.key @@”

GanttChartMenuGetPropertyOptionsGanttChartMenu.json

```
public String getPropertyOptions() {
    return AppUtil.readPluginResource(getClassName(), "/properties/GanttChartMenu.json", null,
    true, "message/GanttChartMenu");
}
```

```
[{
  title : '@@userview.ganttChart.edit@@',
  properties : [{
    name : 'id',
    label : 'Id',
    type : 'hidden'
  }],
  {
    name : 'customId',
    label : '@@userview.ganttChart.customId@@',
    type : 'textfield',
    regex_validation : '^[a-zA-Z0-9_]+$ ',
    validation_message : '@@userview.ganttChart.invalidId@@'
  },
  {
    name : 'label',
    label : '@@userview.ganttChart.label@@',
    type : 'textfield',
    required : 'True',
    value : '@@userview.ganttChart.label.value@@'
  }
}]
```

- [HTMLPluginManager](#)getPluginFreeMarkerTemplateMapString pluginNamefinal.String templatePathString translationPath freemarker” @@ message.key @@” i18n

GanttChartMenugetRenderPagegetRenderPage”GanttChartMenu.ftl”FreeMarker

```

public String getRenderPage() {
    Map model = new HashMap();
    model.put("request", getRequestParameters());
    model.put("element", this);

    PluginManager pluginManager = (PluginManager)AppUtil.getApplicationContext().getBean
("pluginManager");
    String content = pluginManager.getPluginFreeMarkerTemplate(model, getClassName(), "
/templates/GanttChartMenu.ftl", "message/GanttChartMenu");
    return content;
}

```

```

<div>
    <h1>@@userview.ganttChart.label.title@@ : ${element.properties.title!}</h1>
</div>

```

•

GanttChartMenu_zh_CN.properties

e. Felix

"Activator.java" maven Felix FrameworkOSGI

start"registrationList"

```

public void start(BundleContext context) {
    registrationList = new ArrayList<ServiceRegistration>();

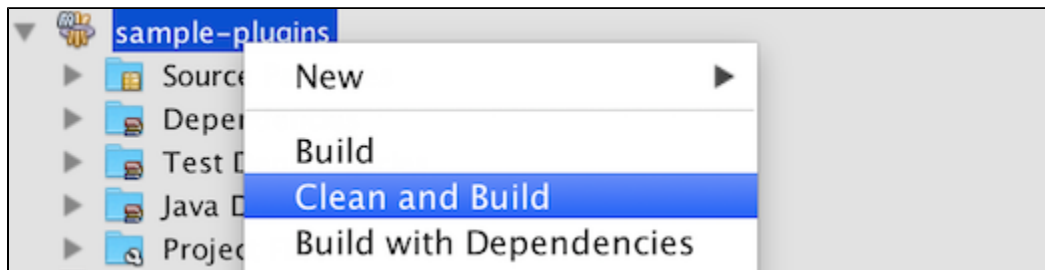
    //Register plugin here
    registrationList.add(context.registerService(MyPlugin.class.getName(), new MyPlugin(), null));
}

```

f.

MavenIDE"mvn clean install""jarjar

Eclipse"maven clean install".



8.

Joget Marketplace info@joget.org