

Date: 20-3-25

1. Create A new component which have news title(should print as h2), news detail(<p>), published date, source create this component using sling model.

a. Create the Component

- Navigate to /apps/myProject/components/
- Create a folder named newsComponent
- Inside newsComponent, add a cq:dialog file for authoring fields.

cq:dialog

```
<jcr:root xmlns:sling="http://www.sling.apache.org/jcr/sling/1.0"
  xmlns:cq="http://www.day.com/jcr/cq/1.0"
  jcr:primaryType="cq:Dialog"
  xtype="dialog">
  <items jcr:primaryType="cq:Widget">
    <title
```

```
sling:resourceType="granite/ui/components/coral/foundation/form/textfield"
```

```
    fieldLabel="News Title"
    name="./newsTitle"/>
```

```
  <detail
```

```
sling:resourceType="granite/ui/components/coral/foundation/form/textarea"
    fieldLabel="News Detail"
    name="./newsDetail"/>
  <publishedDate
```

```
sling:resourceType="granite/ui/components/coral/foundation/form/datefield"
"
```

```
    fieldLabel="Published Date"
    name="./publishedDate"/>
```

```
  <source
```

```
sling:resourceType="granite/ui/components/coral/foundation/form/textfield"
```

```
    fieldLabel="Source"
    name="./source"/>
```

```
  </items>
```

```
</jcr:root>
```

Sling Model(NewsModel.java)

```
package com.myProject.core.models;
```

```
import org.apache.sling.api.resource.Resource;
```

```
import org.apache.sling.models.annotations.Model;
```

```
import org.apache.sling.models.annotations.injectorspecific.ValueMapValue;
```

```
@Model(adaptables = Resource.class)
public class NewsModel {
    @ValueMapValue
    private String newsTitle;
    @ValueMapValue
    private String newsDetail;
    @ValueMapValue
    private String publishedDate;
    @ValueMapValue private String source;
    public String getNewsTitle() {
        return newsTitle;
    }
    public String getNewsDetail() {
        return newsDetail;
    }
    public String getPublishedDate() {
        return publishedDate;
    }
    public String getSource() {
        return source;
    }
}
```

2. Create multi field component(multiple news) using sling model fields: title of new and source of news

Multi-field news component in Adobe Experience Manager (AEM) using a Sling Model:

a. Update cq:dialog to support multifield

```
<jcr:root xmlns:sling="http://www.sling.apache.org/jcr/sling/1.0"
    jcr:primaryType="cq:Dialog"
    xtype="dialog">
    <items jcr:primaryType="cq:Widget">
        <newsItems
            sling:resourceType="granite/ui/components/coral/foundation/form/multifield"
            fieldLabel="News Items"
            name="/newsItems">
            <field
```

```
sling:resourceType="granite/ui/components/coral/foundation/form/textfield"

            fieldLabel="Title"
```

```

        name="./title"/>
    </field>

    sling:resourceType="granite/ui/components/coral/foundation/form/textfield"

        fieldLabel="Source"
        name="./source"/>
    </newsItems>
</items>
</jcr:root>

```

b. Create Sling Model (NewsComponentModel.java)

```

package com.myProject.core.models;
import org.apache.sling.api.resource.Resource;
import org.apache.sling.models.annotations.Model;
import org.apache.sling.models.annotations.injectorspecific.ChildResource;
import java.util.List;
@Model(adaptables = Resource.class)
public class NewsComponentModel {
    @ChildResource(name = "newsItems")
    private List<NewsItem> newsItems;
    public List<NewsItem> getNewsItems() {
        return newsItems;
    }
    public static class NewsItem {
        @ValueMapValue
        private String title;
        @ValueMapValue
        private String source;
        public String getTitle() {
            return title;
        }
        public String getSource() {
            return source;
        }
    }
}

```

c. Update Component HTML (newsComponent.html)

```

<ul>
    <sly data-sly-list.newsItem="${newsItems}">
        <li>

```

```

        <h2>${newsItem.title}</h2>
        <p><strong>Source:</strong> ${newsItem.source}</p>
    </li>
</sly>
</ul>

```

3. Create clientlibs for news component

Inside clientlibs, create:

- js.txt (to manage JavaScript files)
- css.txt (to manage CSS files)

news.js

```
console.log("News Component Loaded");
```

news.css

```

.news-component {
    font-family: Arial, sans-serif;
}
.news-component h2 {
    color: blue;
}

```

jcr:content.xml

```

<jcr:root xmlns:jcr="http://www.jcp.org/jcr/1.0"
    xmlns:sling="http://www.sling.apache.org/jcr/sling/1.0"
    xmlns:cq="http://www.day.com/jcr/cq/1.0"
    jcr:primaryType="cq:ClientLibraryFolder"
    categories="myProject.newsComponent"
    dependencies="[cq.jquery]"/>

```

newsComponent.html

```

<sly data-sly-use:clientlib="${'com.adobe.granite.ui.clientlibs.ClientLibrary'}"
    data-sly-call="${clientlib.js @ categories='myProject.newsComponent'}"/>
<sly data-sly-call="${clientlib.css @ categories='myProject.newsComponent'}"/>

```

4. Apply Green colour to the heading(h2) and yellow colour to news detail(<p>) and date should be black in colour.

Update news.css

```

.news-component h2 {
    color: green; // Heading in green
}
.news-component p {
    color: yellow; // News details in yellow
}
.news-component .published-date {
    color: black; // Published date in black
}

```

newsComponent.html

```
<h2 class="news-title">${properties.newsTitle}</h2>
<p class="news-detail">${properties.newsDetail}</p>
<p class="published-date"><strong>Published Date:</strong>
${properties.publishedDate}</p>
```

5. Add Component style to add custom style name (cop-news-component) in news component

cq:dialog

```
<jcr:root xmlns:sling="http://www.sling.apache.org/jcr/sling/1.0"
  jcr:primaryType="cq:Dialog"
  xtype="dialog">
  <items jcr:primaryType="cq:Widget">
    <style
      sling:resourceType="granite/ui/components/coral/foundation/form/select"
      fieldLabel="Component Style"
      name="./componentStyle">
      <items jcr:primaryType="nt:unstructured">
        <default
          sling:resourceType="granite/ui/components/coral/foundation/form/select/option"
          text="Default"
          value="default"/>
        <custom
          sling:resourceType="granite/ui/components/coral/foundation/form/select/option"
          text="Cop News Component"
          value="cop-news-component"/>
      </items>
    </style>
  </items>
</jcr:root>
```

newsComponent.html

```
<div class="${properties.componentStyle}">
  <h2>${properties.newsTitle}</h2>
  <p>${properties.newsDetail}</p>
  <p><strong>Published Date:</strong> ${properties.publishedDate}</p>
  <p><strong>Source:</strong> ${properties.source}</p>
</div>
```

6. Create a base page component and add new file as metadata so that it can print og:title, og:description and og:image link that file in base page.html

Create a Metadata File (metadata.html)

- Inside basePage, create metadata.html to store Open Graph metadata.

```
<meta property="og:title" content="{properties.ogTitle}">
<meta property="og:description" content="{properties.ogDescription}">
<meta property="og:image" content="{properties.ogImage}">
```

7. **Create custom page properties saying Global properties and 3 fields should be there as og:title, og :description and og:image path**

Modify Sling Model to Fetch Values (PagePropertiesModel.java)

```
package com.myProject.core.models;
import org.apache.sling.api.resource.Resource;
import org.apache.sling.models.annotations.Model;
import org.apache.sling.models.annotations.injectorspecific.ValueMapValue;
@Model(adaptables = Resource.class)
public class PagePropertiesModel {
    @ValueMapValue
    private String ogTitle;
    @ValueMapValue
    private String ogDescription;
    @ValueMapValue
    private String ogImagePath;
    public String getOgTitle() {
        return ogTitle;
    }
    public String getOgDescription() {
        return ogDescription;
    }
    public String getOgImagePath() {
        return ogImagePath;
    }
}
```

8. **What is extraclientlib add it this multi field component**

ExtraClientLibs in Adobe Experience Manager (AEM) allow you to dynamically include additional client libraries in a component beyond its predefined dependencies. This helps when certain styles or scripts are required only for specific components.

Update the **MultiNewsModel.java** to fetch the authored client library

```
package com.myProject.core.models;

import org.apache.sling.api.resource.Resource;

import org.apache.sling.models.annotations.Model;
```

```

import org.apache.sling.models.annotations.injectorspecific.ValueMapValue;

@Model(adaptables = Resource.class)

public class MultiNewsModel {

    @ValueMapValue

    private String extraClientLibs;

    public String getExtraClientLibs() {

        return extraClientLibs;

    }

}

```

<p>7 Qualities to Look for in a Church</p> <p>It's easy to find a bad church. It's much harder to find a good church. And some believers are exhausted and disheartened by the search, while others give up altogether. But God's people must not forsake the fellowship found only in the Body of Christ.READ MORE...</p> <p>letters@gty.org (Grace to You)</p> <p>2020-08-19T07:37:54Z GTY.org</p>	<p>Brewers to take on Twins on the road</p> <p>Follow the StarTribune for the news, photos and videos from the Twin Cities and beyond.</p> <p>The Associated Press</p> <p>2020-08-19T07:25:04Z Minneapolis Star Tribune</p>	<p>Singapore Had the Most COVID-19 Cases in ASEAN as Migrants Became Infected. What's Been Done?</p> <p>Singapore's prosperity is underpinned by an overlooked foreign work force grant, advocates say. Domestic worker Yulia Endang feels torn about the stunning burst of COVID-19 cases in Singapore among foreigners like her. The surge of cases starting in April is...</p> <p>2020-08-19T07:23:31Z VOA News</p>
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