

## AEM TASK - 5

### 1. Create 5 Unique News Article Pages Under /content/us/en/news

- Each news article should be unique and should use the **News Component**.

#### Steps:

1. Go to **AEM Sites Console** (/sites.html).
2. Navigate to /content/us/en/news.
3. **Create 5 new pages** using the **News Room Template**.
4. **Set Content for Each Page:**
  - a. Use the **News Component** to provide:
    - i. **Title**
    - ii. **News Details**
    - iii. **Published Date**
  - b. Example pages:
    - i. latest-tech-innovation.html → *Latest advancements in AI*
    - ii. sports-highlights.html → *Major football match updates*
    - iii. business-trends.html → *Current market trends*
    - iv. entertainment-news.html → *Movie releases and celebrity updates*
    - v. health-wellness.html → *Tips on mental and physical health*

### 2. Create a Header Experience Fragment (XF)

- The header should include a **menu with "News", "Contact Us", and "About Me" pages**.

#### Steps:

1. Go to **AEM Experience Fragments** (/content/experience-fragments).

2. Create a **new XF called header**.
3. Add a **Navigation Component** and configure it:
  - a. **News** → /content/us/en/news
  - b. **Contact Us** → /content/us/en/contact
  - c. **About Me** → /content/us/en/about
4. Use this **XF in the News Pages as a Header**.

### 3. Create "About Me" and "Contact Us" Pages

- **About Me Page:**
  - Use **Teaser, Image, Text, and Title Components**.
  - Provide details about the journalist.
- **Contact Us Page:**
  - Use **Text Components** to show:
    - **Mobile Number**
    - **Office Address**
    - **Email Address**

### 4. Create a Footer Experience Fragment (XF)

- The footer should have **4 sections**:
  - **News Menu Section** → Use **List Component** to show 4 news articles.
  - **About Me Section** → Use **Text Component** to add a brief description.
  - **Contact Us Section** → Use **Text Component** to show contact details.
  - **Social Media Section** → Use **List Component** to add links to social media profiles.

#### Steps:

1. Navigate to **AEM Experience Fragments (/content/experience-fragments)**.
2. Create a **new XF called footer**.
3. Add **4 sections** using components as described above.
4. Use this XF in the **News Pages as a Footer**.

## 5. Create a Custom Service to Print "Hello World"

- The service should be called from the **News Component's Sling Model** and log the value.

### Steps:

#### 1. Create an OSGi Service (HelloWorldService.java)

```
package com.myproject.core.services;

import org.osgi.service.component.annotations.Component;
import org.osgi.service.component.annotations.ServiceScope;

@Component(service = HelloWorldService.class, scope =
ServiceScope.SINGLETON)
public class HelloWorldService {
    public String getMessage() {
        return "Hello World from AEM Service!";
    }
}
```

#### 2. Inject the Service in the Sling Model of the News Component

```
package com.myproject.core.models;

import com.myproject.core.services.HelloWorldService;
import org.apache.sling.api.resource.Resource;
import org.apache.sling.models.annotations.DefaultInjectionStrategy;
import org.apache.sling.models.annotations.Model;
import org.apache.sling.models.annotations.injectorspecific.Self;
import
org.apache.sling.models.annotations.injectorspecific.OSGiService;
import org.slf4j.Logger;
import org.slf4j.LoggerFactory;
```

```

@Model(adaptables = Resource.class, defaultInjectionStrategy =
DefaultInjectionStrategy.OPTIONAL)
public class NewsModel {

    private static final Logger LOG =
LoggerFactory.getLogger(NewsModel.class);

    @OSGiService
    private HelloWorldService helloWorldService;

    @Self
    private Resource resource;

    public String getNewsMessage() {
        String message = helloWorldService.getMessage();
        LOG.info("News Component Message: {}", message);
        return message;
    }
}

```

## 6. Create Custom Configurations for a 3rd Party API

- The configuration should allow us to **fetch JSON data** and log it.

### Steps:

#### 1. Create an OSGi Configuration (ThirdPartyApiConfig.java)

```

package com.myproject.core.config;

import org.osgi.service.metatype.annotations.AttributeDefinition;
import org.osgi.service.metatype.annotations.ObjectClassDefinition;

@ObjectClassDefinition(name = "Third Party API Configuration")
public @interface ThirdPartyApiConfig {

```

```

        @AttributeDefinition(name = "API Endpoint", description = "Provide
the third-party API URL")
        String apiUrl() default
"https://jsonplaceholder.typicode.com/posts";
    }

```

## 2. Create a Service to Fetch Data (ThirdPartyApiService.java)

```

package com.myproject.core.services;

import com.myproject.core.config.ThirdPartyApiConfig;
import org.apache.http.client.fluent.Request;
import org.apache.http.client.fluent.Response;
import org.apache.http.entity.ContentType;
import org.osgi.service.component.annotations.Activate;
import org.osgi.service.component.annotations.Component;
import org.osgi.service.component.annotations.Modified;
import org.osgi.service.component.annotations.Reference;
import org.osgi.service.metatype.annotations.Designate;
import org.slf4j.Logger;
import org.slf4j.LoggerFactory;

@Component(service = ThirdPartyApiService.class, immediate = true)
@Designate(ocd = ThirdPartyApiConfig.class)
public class ThirdPartyApiService {

    private static final Logger LOG =
LoggerFactory.getLogger(ThirdPartyApiService.class);

    private String apiUrl;

    @Activate
    @Modified
    protected void activate(ThirdPartyApiConfig config) {
        this.apiUrl = config.apiUrl();
    }

    public String fetchApiData() {
        try {

```

```

        Response response = Request.Get(apiUrl)
            .addHeader("Content-Type",
ContentTypes.APPLICATION_JSON.getMimeType())
            .execute();

        String responseData = response.returnContent().asString();
        LOG.info("API Response: {}", responseData);
        return responseData;
    } catch (Exception e) {
        LOG.error("Error fetching API data", e);
        return null;
    }
}
}

```

### 3. Call This Service in the News Component's Sling Model

```

@OSGiService
private ThirdPartyApiService thirdPartyApiService;

public String getApiData() {
    String apiData = thirdPartyApiService.fetchApiData();
    LOG.info("News Component API Data: {}", apiData);
    return apiData;}

```

OUTPUT SCREENSHOTS:



