1. Create 5 News Article Pages

Steps:

- 1. Navigate to Sites > AEM > /content/us/en/news/.
- 2. Create 5 unique news article pages.
- 3. Use the News Component to provide:
 - o Title
 - o News Detail
 - o Published Date
- 4. Publish the pages.

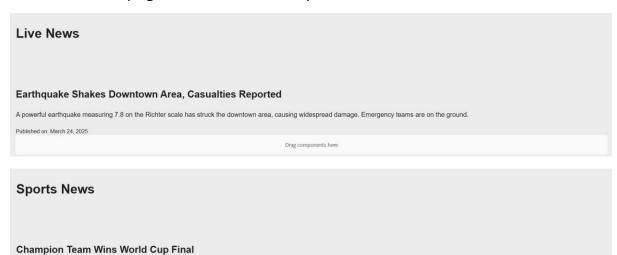
Screenshot:

Published on: March 24, 2025

• News pages list in AEM.



• All five news pages with the News Component filled.



Drag components here

The match was a thrilling contest between Team A and Team B, with Team A emerging victorious in a nail-biting finish. This marks their third World Cup win in history.

Tech News
New Al Breakthrough Could Revolutionize Healthcare
Researchers have unveiled a new AI algorithm that promises to revolutionize the way medical diagnoses are made, potentially saving millions of lives annually. Published on: March 24, 2025
Drag components here
Cinema News
Oscar Winner Announces New Movie Project
Academy Award-winning director John Doe has revealed details about his upcoming film, set to release next year. The movie will explore themes of love and loss in a dystopian future. Published on: March 24, 2025
Drag components here
Breaking News
Massive Fire Breaks Out in City Center, Emergency Crews Responding
A large fire has erupted in the heart of the city center, forcing several nearby buildings to evacuate. Firefighters are on-site, and emergency services are working to control the blaze. Authorities are urging the public to avoid the area.
Published on: March 24, 2025 Drag components here

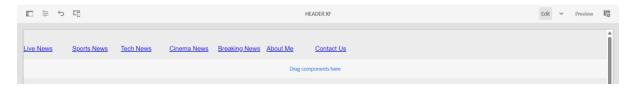
2. Create Header Experience Fragment (XF)

Steps:

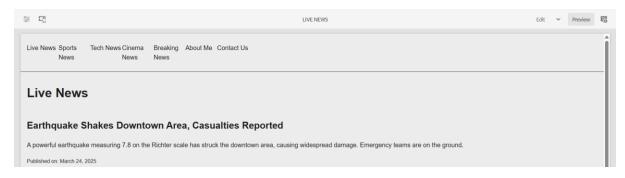
- 1. Navigate to Experience Fragments > Create XF.
- 2. Name it Header XF.
- 3. Add a Menu Component linking to:
 - o News (points to news articles)
 - o About Me (Teaser/Image/Text for journalist details)
 - o Contact Us (Text for contact details like mobile, office address, email)
- 4. Publish and include this XF in the site header.

Screenshot:

• Header XF structure with menu.



• Preview of the Header XF on a webpage.



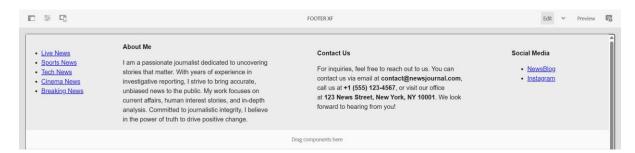
3. Create Footer Experience Fragment (XF)

Steps:

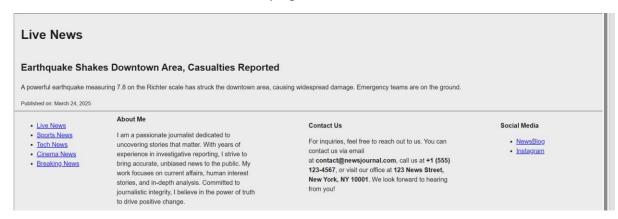
- 1. Navigate to Experience Fragments > Create XF.
- 2. Name it Footer XF.
- 3. Add 4 sections:
 - o News Menu: List component with 4 news articles.
 - About Me: Text component with content.
 - o Contact Us: Text component with office/mobile/email.
 - Social Media: List component with social media links.
- 4. Publish and include this XF in the site footer.

Screenshot:

• Footer XF structure with sections.



• Preview of the Footer XF on a webpage.



4. Create a Custom Service to Print 'Hello World'

Steps:

- 1. Implement an OSGi service with a method returning "Hello World".
- 2. Inject the service into the News Component Sling Model.
- 3. Print the service output in logs.
- 4. Deploy and verify in AEM logs.

Java Code:

Java code for the custom service.

```
HelloWorldService.java:
package com.newsBlog.core.services;
public interface HelloWorldService {
 void logHelloMessage();
HelloWorldServiceImpl.java:
package com.newsBlog.core.services.impl;
import com.newsBlog.core.services.HelloWorldService;
import org.osgi.service.component.annotations.Component;
import org.slf4j.Logger;
import org.slf4jLoggerFactory;
@Component(service = HelloWorldService.class)
public\,class\,HelloWorldServiceImpl\,implements\,HelloWorldService\,\{
 private \ static \ final \ Logger LOG = Logger Factory. get Logger (Hello World Service Impl. class); \\
 @Override
 public void logHelloMessage() {
   LOG.info("Hello World from OSGi Service!");
```

Screenshot:

Log output showing "Hello World".

```
0.4.2025 (0.03:10.305 THEO* [[0.01:01:0.00:01] [17453223003] GIT /met/overlay/granita/is/content/shal/globians/cg/isen/tabl/is/content-0.40.htm]/met/overlay/granita/is/content-0.40.htm]/met/overlay/granita/is/content-0.40.htm]/met/overlay/granita/is/content-0.40.htm]/met/overlay/granita/is/content-0.40.htm]/met/overlay/granita/is/content-0.40.htm]/met/overlay/granita/is/content-0.40.htm]/met/overlay/granita/is/content-0.40.htm]/met/overlay/granita/is/content-0.40.htm]/met/overlay/granita/is/content-0.40.htm]/met/overlay/granita/is/content-0.40.htm]/met/overlay/granita/is/content-0.40.htm]/met/overlay/granita/is/content-0.40.htm]/met/overlay/granita/is/content-0.40.htm]/met/overlay/granita/is/content-0.40.htm]/met/overlay/granita/is/content-0.40.htm]/met/overlay/granita/is/content-0.40.htm]/met/overlay/granita/is/content-0.40.htm]/met/overlay/granita/is/content-0.40.htm]/met/overlay/granita/is/content-0.40.htm]/met/overlay/granita/is/content-0.40.htm]/met/overlay/granita/is/content-0.40.htm]/met/overlay/granita/is/content-0.40.htm]/met/overlay/granita/is/content-0.40.htm]/met/overlay/granita/is/content-0.40.htm]/met/overlay/granita/is/content-0.40.htm]/met/overlay/granita/is/content-0.40.htm]/met/overlay/granita/is/content-0.40.htm]/met/overlay/granita/is/content-0.40.htm]/met/overlay/granita/is/content-0.40.htm]/met/overlay/granita/is/content-0.40.htm]/met/overlay/granita/is/content-0.40.htm]/met/overlay/granita/is/content-0.40.htm]/met/overlay/granita/is/content-0.40.htm]/met/overlay/granita/is/content-0.40.htm]/met/overlay/granita/is/content-0.40.htm]/met/overlay/granita/is/content-0.40.htm]/met/overlay/granita/is/content-0.40.htm]/met/overlay/granita/is/content-0.40.htm]/met/overlay/granita/is/content-0.40.htm]/met/overlay/granita/is/content-0.40.htm]/met/overlay/granita/is/content-0.40.htm]/met/overlay/granita/is/content-0.40.htm]/met/overlay/granita/is/content-0.40.htm]/met/overlay/granita/is/content-0.40.htm]/met/overlay/granita/is/content-0.40.htm]/met/overlay/granita/is/content-0.40.htm]/met/overlay/gra
```

5. Create Custom Configurations for 3rd Party API

Steps:

- Create an OSGi configuration to accept a URL (e.g., https://jsonplaceholder.typicode.com/posts).
- 2. Implement a service to fetch and log JSON data.
- 3. Deploy and test by updating the configuration.
- 4. Verify the API response in logs.

Java Code:

Implement a service to fetch and log JSON data.

ApiService.java

```
package com.newsBlog.core.services;
import org.apache.commons.io.IOUtils;
import\ or {\tt g.apache.} http. client. methods. Close able Http Response;
import\ or g. apache. http. client. methods. Http Get;
import org.apache.http.impl.client.CloseableHttpClient;
import org.apache.http.impl.client.HttpClients;
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.metatype.annotations.Designate;
import org.slf4j.Logger;
import org.slf4jLoggerFactory;
import java.io.InputStream;
import java.nio.charset.StandardCharsets;
@Component(service = ApiService.class, immediate = true)
@Designate(ocd = ApiConfig.class)
public class ApiService {
 private static final Logger LOG = LoggerFactory.getLogger(ApiService.class);
 private String apiUrl;
 @Activate
 @Modified
 protected void activate(ApiConfig config){
   this.apiUrl = config.apiEndpoint();
   LOG.info("API URL Configured: {}", apiUrl);
   fetchApiData();
 public void fetchApiData() {
   try (CloseableHttpClient httpClient = HttpClients.createDefault()){
     HttpGet request = new HttpGet(apiUrl);
```

try (CloseableHttpResponse response = httpClient.execute(request);

```
InputStream contentStream = response.getEntity().getContent()) {

String jsonResponse = IOUtils.toString(contentStream, StandardCharsets.UTF_8);

LOG.info("API Response: {}", jsonResponse);

}
} catch (Exception e) {

LOG.error("Error fetching API data", e);

}

ApiConfig.java

package com.newsBlog.core.services;

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

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

@ObjectClassDefinition(name = "API Configuration", description = "Configuration for third-party API")

public @interface ApiConfig {

@AttributeDefinition(name = "API Endpoint", description = "Provide the API URL to fetch JSON data")

String apiEndpoint() default "https://jsonplaceholder.typicode.com/posts";

}
```

Screenshot:

• Log output showing fetched JSON data.

```
20.4.205 81.99.5.80 % THYO? [Falloqgiistener] Events.Service.com. adobe_gravite.repository Service [6796, [forg. pasche_jackrabbit.eak.pj.combetw-ewf8em]] Service(went MEGISTRED 02.04.205 91.99.5.00 % THYO? [felioggiistener] Events.Service.com. adobe_gravite.repository Service [6796, [forg. pasche_jackrabbit.eak.pj.combetw-ewf8em]] Service(went MEGISTRED 02.04.205 91.99.5.00 % THYO? [felioggiistener] Events.Service.com. adobe_gravite.repository Service [6796, [forg. pasche_jackrabbit.eak.pj.combetw-ewf8em]] Service(went MEGISTRED 02.04.205 91.99.5.00 % THYO? [felioggiistener] Events.Service.com. adobe_gravite.repository Service [6796, [forg. pasche_jackrabbit.eak.pj.combetw-ewf8em]] Service(went MEGISTRED 02.04.205 91.99.5.00 % THYO? [felioggiistener] Events.Service.docs.pj.service.gravity.pj.com. adobe_gravite.repository Service [6796, [forg. pasche_jackrabbit.eak.pj.com.]] Service(went MEGISTRED 02.04.205 91.99.5.00 % THYO) Service [6796, [forg. pasche_jackrabbit.eak.pj.com.]] Service(went MEGISTRED 02.04.205 91.99.5.00 % THYO) Service [6796, [forg. pasche_jackrabbit.eak.pj.com.]] Service(went MEGISTRED 02.04.205 91.99.5.00 % THYO) Service [6796, [forg. pasche_jackrabbit.eak.pj.com.]] Service(went MEGISTRED 02.04.205 91.99.5.00 % THYO) Service [6796, [forg. pasche_jackrabbit.eak.pj.com.]] Service(went MEGISTRED 02.04.205 91.99.5.00 % THYO) Service [6796, [forg. pasche_jackrabbit.eak.pj.com.]] Service(went MEGISTRED 02.04.205 91.99.5.00 % THYO) Service [6796, [forg. pasche_jackrabbit.eak.pj.com.]] Service(went MEGISTRED 02.04.205 91.99.5.00 % Thyo) Service [6796, [forg. pasche_jackrabbit.eak.pj.com.]] Service(went MEGISTRED 02.04.205 91.99.5.00 % Thyo) Service [6796, [forg. pasche_jackrabbit.eak.pj.com.]] Service(went MEGISTRED 02.04.205 91.99.5.00 % Thyo) Service [6796, [forg. pasche_jackrabbit.eak.pj.com.]] Service(went MEGISTRED 02.05 % Thyo) Service [6796, [forg. pasche_jackrabbit.eak.pj.com.]] Service(went MEGISTRED 02.05 % Thyo) Service [6796, [forg. pasche_jackrabbit.eak.pj.com.]] Service(went MEGISTRED
```