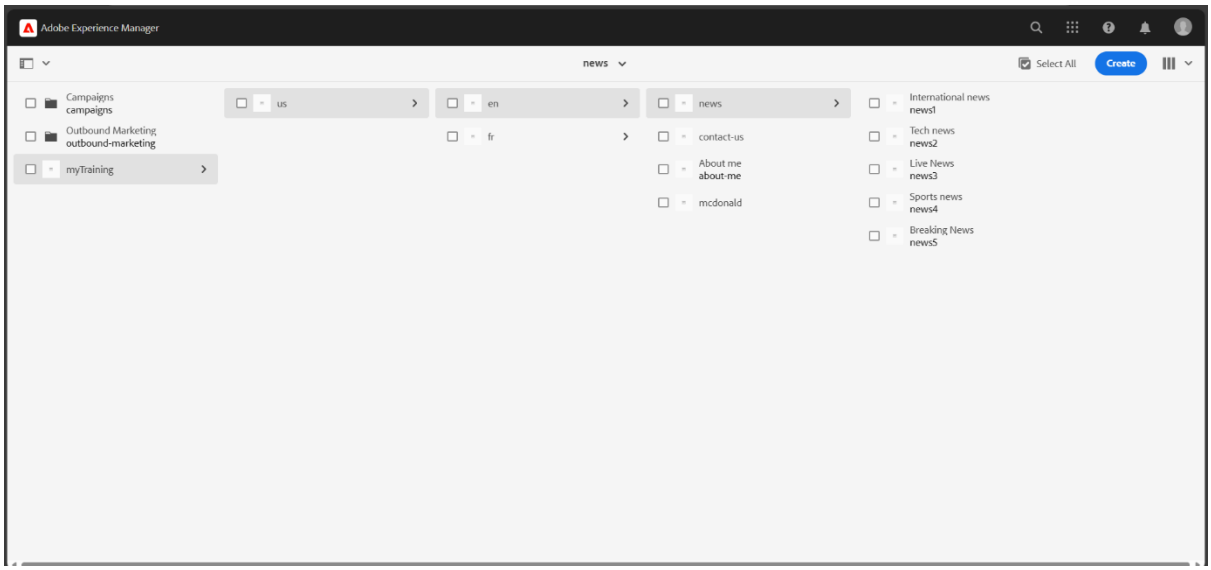
# AEM – Task 5

## Step 1: Create 5 News Article Pages

1. Navigate to AEM Sites → /content/us/en/news.
2. Click Create → Page, choose the News Template, and enter details:
    - Title: Unique for each article (e.g., "Tech Innovations 2025", "Global Economy Update", "AI in Healthcare", etc.).
    - Page Name: news-1, news-2, etc.
3. Open each page and add the News Component:
    - Title: Set appropriate news title.
    - News Details: Add content.
    - Published Date: Set date.
4. Save and publish.

## Screenshot



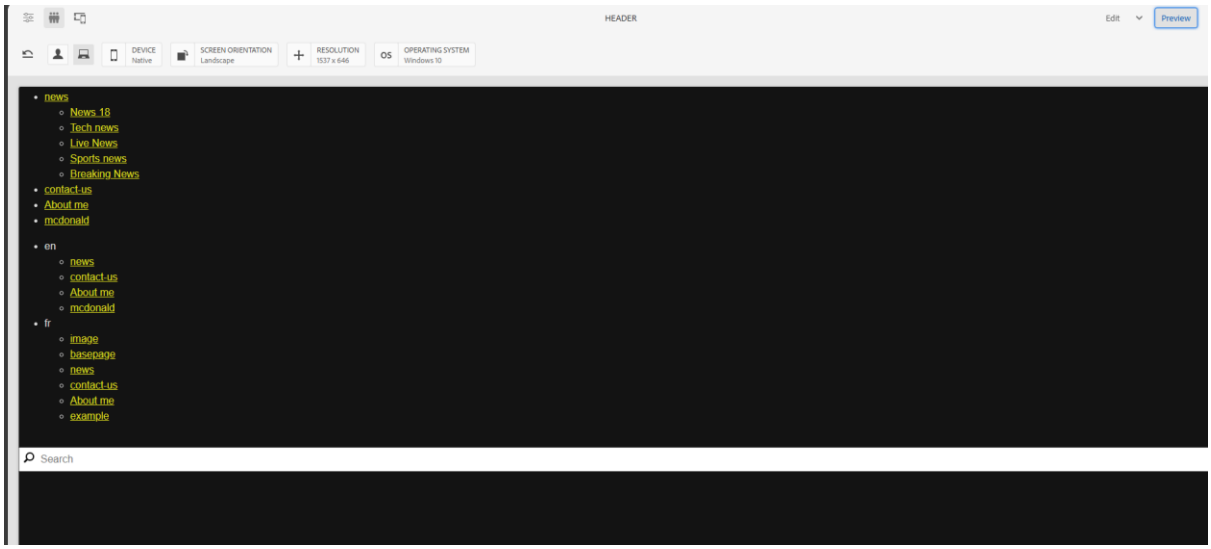

## Step 2: Create Header Experience Fragment (XF)

1. Navigate to AEM → Experience Fragments.
2. Click Create → Experience Fragment.

3. Choose Header Template, set the name as News Header, and save it at /content/experience-fragments/us/en/news-header.
4. Open the News Header XF, add:
    - Navigation Component (links to "News", "About Me", and "Contact Us").
5. Save and publish.

## Screenshot

- Experience Fragmnt




- Header Display


## Step 3: Create "About Me" and "Contact Us" Pages

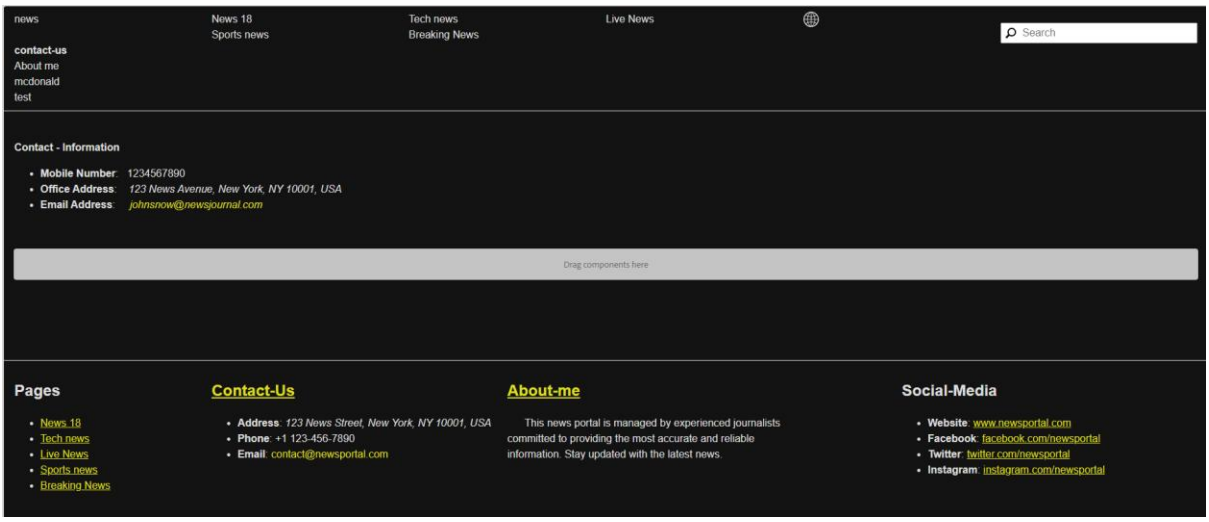
1. Navigate to /content/us/en/ → Create Page for:
    - About Me Page
    - Contact Us Page
2. Edit "About Me" Page:

- Image Component: Journalist photo.
- Text Component: Biography.
- Title Component: "About Me".

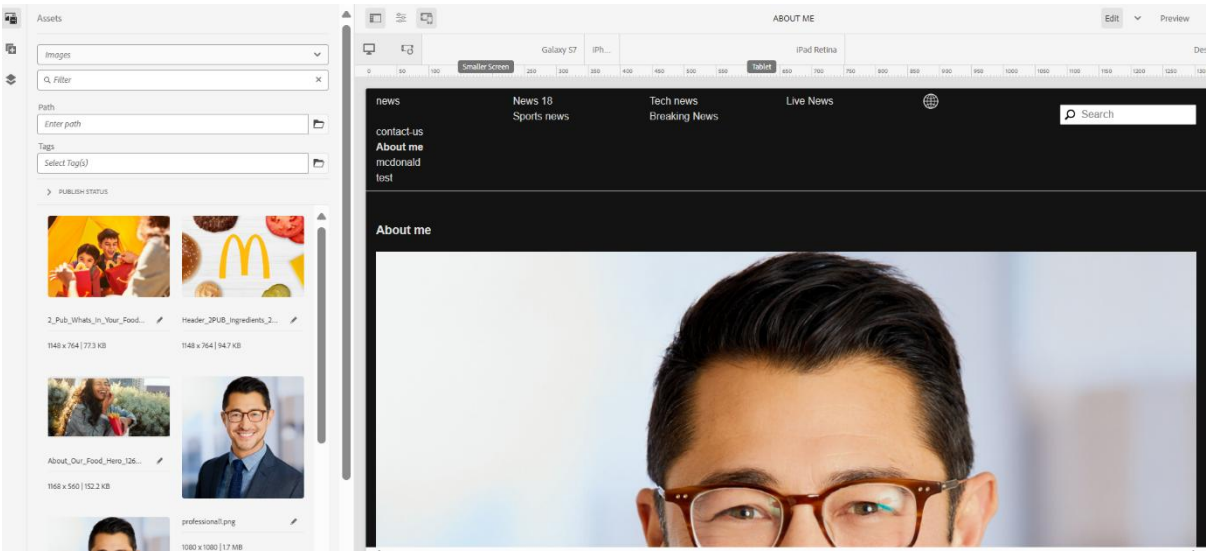
3. Edit "Contact Us" Page:
   - Text Component: Phone number, email, and office address.
4. Save and publish.

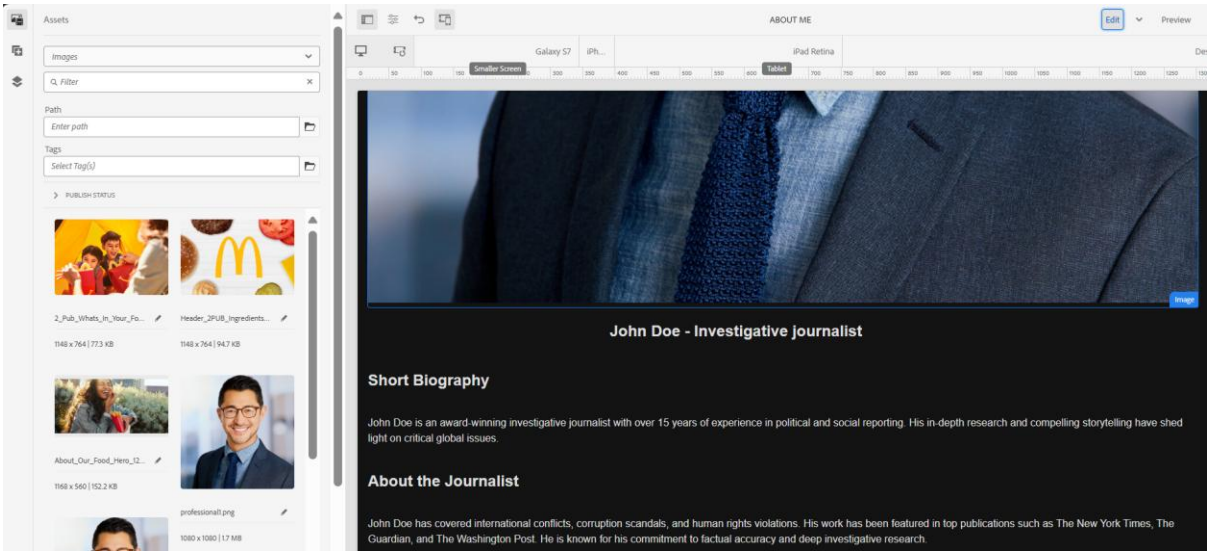
## Screenshots

## Contact page




## About us page

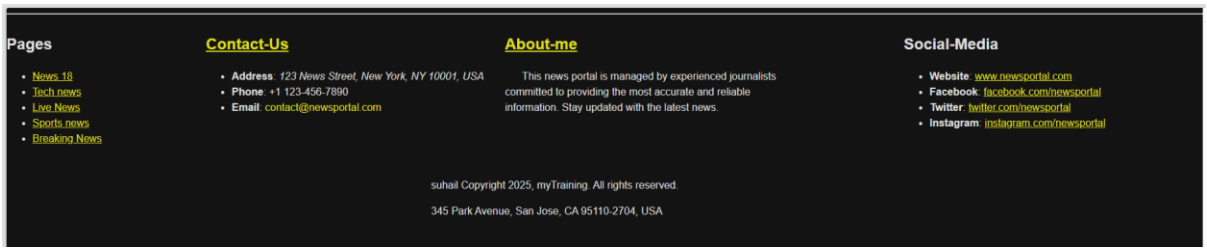





## Step 4: Create Footer Experience Fragment (XF)

1. Navigate to AEM → Experience Fragments.
2. Click Create → Experience Fragment and choose Footer Template.
3. Name it News Footer, path: /content/experience-fragments/us/en/news-footer.
4. Add sections:
    - News Menu (List Component): Show 4 recent articles.
    - About Me (Text Component): Add journalist info.
    - Contact Us (Text Component): Add contact details.
    - Social Media (List Component): Add links to social profiles.
5. Save and publish.

### Screenshot



## Step 5: Create a Custom Service to Print "Hello World"

1. Navigate to your AEM Core Module and create a new Java service:

## Java Code:

```
@Component(service = HelloWorldService.class, immediate = true)
public class HelloWorldService {
    public String getMessage() {
        return "Hello, World!";
    }
}
```

2. Inject this service into your News Component's Sling Model:

## Java Code:

```
@Model(adaptables = Resource.class, defaultInjectionStrategy =
DefaultInjectionStrategy.OPTIONAL)
public class NewsModel {
    @OSGiService
    private HelloWorldService helloWorldService;
    public String getHelloMessage() {
        return helloWorldService.getMessage();
    }
}
```

3. Print the message in logs:

## Java Code:

```
private static final Logger LOG = LoggerFactory.getLogger(NewsModel.class);
public String getHelloMessage() {
    String message = helloWorldService.getMessage();
    LOG.info("HelloWorldService Output: {}", message);
    return message;
}
```

4. Deploy and test it by checking AEM logs (tail -f error.log).


## Step 6: Create Custom Configurations for Third-Party API

1. Go to **AEM → Tools → Configuration Browser**.
2. Click **Create → Configuration** and name it thirdPartyAPIConfig.
3. Open **OSGi Configuration Console** and create a new configuration:

## Java code:

```
@Component(service = ThirdPartyAPIService.class, immediate = true)
@Designate(ocd = ThirdPartyAPIConfig.class)
public class ThirdPartyAPIService {


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


    public String fetchAPIData() {
        try (CloseableHttpClient client = HttpClients.createDefault()) {
            HttpGet request = new HttpGet(apiUrl);
            HttpResponse response = client.execute(request);
            return EntityUtils.toString(response.getEntity());
        } catch (Exception e) {
            LOG.error("Error fetching API data", e);
            return "{}";
        }
    }
```

}

```
@ObjectClassDefinition(name = "Third-Party API Configuration")
public @interface ThirdPartyAPIConfig {
    @AttributeDefinition(name = "API URL", description = "Enter the API URL")
    String apiUrl() default "https://jsonplaceholder.typicode.com/posts";
}
```

4. **Deploy and check logs (tail -f error.log)**
    - Expected Output: JSON data from https://jsonplaceholder.typicode.com/posts.

```
02.04.2025 11:06:46.772 *INFO* [OsgiInstallerImpl] com.myTraining.core.services.ApiService ? Configured API URL: https://jsonplaceholder.typicode.com/posts
02.04.2025 11:06:46.778 *INFO* [OsgiInstallerImpl] com.myTraining.core.services.ApiService ? Fetching API data from: https://jsonplaceholder.typicode.com/posts
02.04.2025 11:06:48.810 *INFO* [OsgiInstallerImpl] com.myTraining.core.services.ApiService ? HTTP Response Code: 200
02.04.2025 11:06:49.012 *INFO* [OsgiInstallerImpl] com.myTraining.core.services.ApiService ? API Response Data: [_ {_    "userId": 1,_    "id": 1,_    "title": "sunt aut
facere repellat provident occaecati excepturi optio reprehenderit",_    "body": "quia et suscipit\nsuscipit recusandae consequuntur expedita et cum\nreprehenderit molestiae
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