1. What is DAM and Why Do We Use It?

DAM stands for **Digital Asset Management**. It's a central repository within AEM where digital content like images, videos, audio files, PDFs, and other types of media are stored, organized, and managed.

Why Use DAM?

- **Centralized Storage**: It provides a central location for all digital assets, making it easier to organize and retrieve them.

- **Reusability**: Assets stored in the DAM can be reused across multiple pages and components without needing to upload them repeatedly.

- **Metadata Management**: You can add metadata (e.g., title, description, keywords) to assets for better searchability and management.

- **Renditions**: DAM allows the creation of multiple renditions (different formats or sizes) of the same asset for various uses (e.g., thumbnails, web-optimized images).

- **Versioning**: It allows version control of assets, so you can track changes over time and revert to previous versions if needed.

2. Create a Folder Inside the Project Folder and Upload 2 Images

In this step, we will create a folder under the DAM section and upload two images to it. Then, we'll use those images in a page through the AEM Image Component.

Steps:

1. **Log in to AEM Author:** Go to http://localhost:4502 to access the AEM Author instance.

2. **Navigate to DAM:** In AEM, go to the **DAM** console:

   o Go to **Assets** > **Files** (under the AEM navigation).

Akshai Krishna A

3. **Create a Folder:**

   o   In the **DAM** interface, click the **Create** button on the top left, and choose **Folder**.

   o   In the folder creation dialog, provide the following structure:

      ▪   **Folder Name**: myTraining/us/en-us

   ▪   This will create a folder under /content/dam/myTraining/us/en-us.

4. **Upload Images:**

   o   Inside the /content/dam/myTraining/us/en-us folder, click **Upload** and choose the 2 image files you want to upload.

   o   Once uploaded, you will see the images in this folder.

Add these Images to a Page:

To display the images on a page using the **Image Component**, follow these steps:

1. **Navigate to Pages:** Go to **Sites** > **Your Site** (the site where you want to display these images).

2. **Edit a Page:**

   o   Select a page, and click **Edit** to enter page authoring mode.

3. **Add Image Component:**

   o   In the page editor, drag and drop the **Image** component from the side panel (if available).

   o   Select **Insert Image** and browse to /content/dam/myTraining/us/en-us, where your images are stored.

   o   Select one of the images, and it will appear on the page.

   o   Repeat this for the second image if needed.

Akshai Krishna A
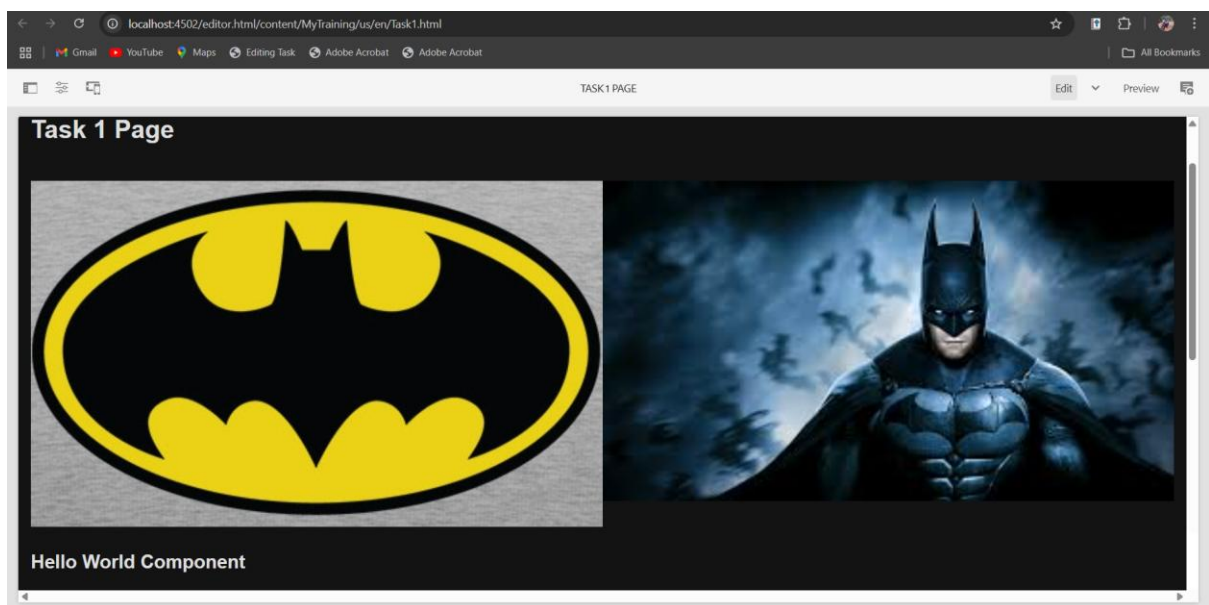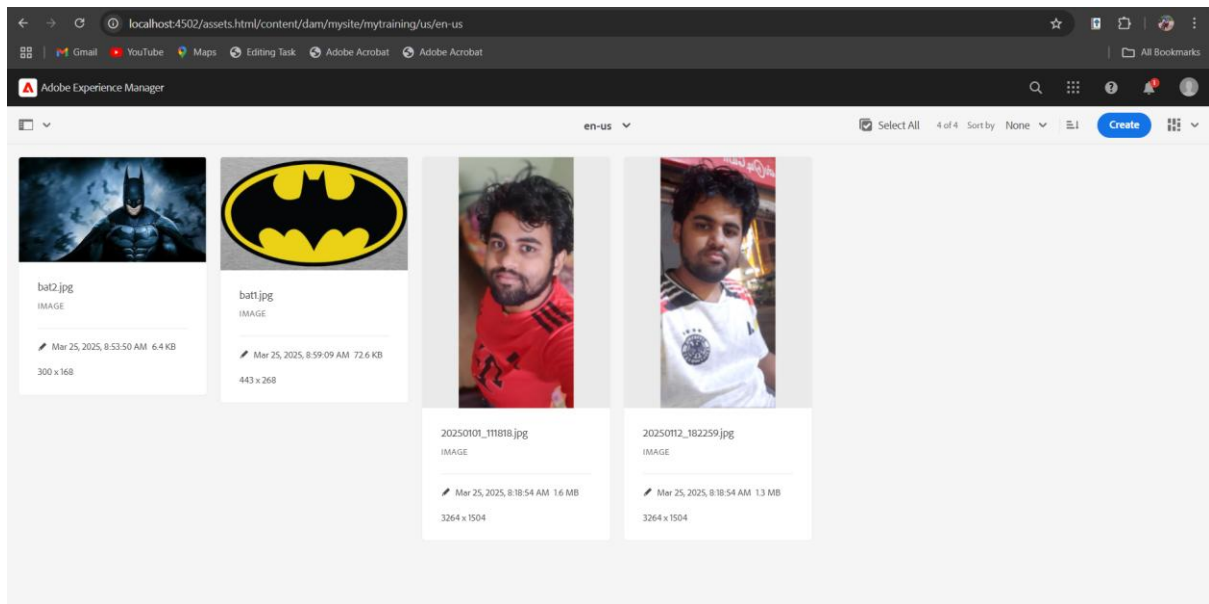
3. What are Renditions? Check Renditions for the 2 Images

Renditions are different versions of the same digital asset. They are created automatically or manually and are often used to optimize the asset for specific purposes (e.g., web usage, mobile view, high-resolution prints).

For example:

- You upload a high-resolution image (let's say 3000x2000 pixels) into AEM. AEM can automatically generate several renditions:

- A thumbnail (e.g., 100x100 pixels).

- A medium-sized image (e.g., 800x600 pixels).

- A full-size high-resolution image.

Steps to Check Renditions:

1. **Navigate to DAM**: Go to /content/dam/myTraining/us/en-us where your images are stored.

2. **Right-click on an Image**: Select one of the images you uploaded.

3. **View Renditions**: In the **properties** panel for the image, look for an option like **Renditions**. You should see different versions of your image, such as thumbnails or other resized versions.
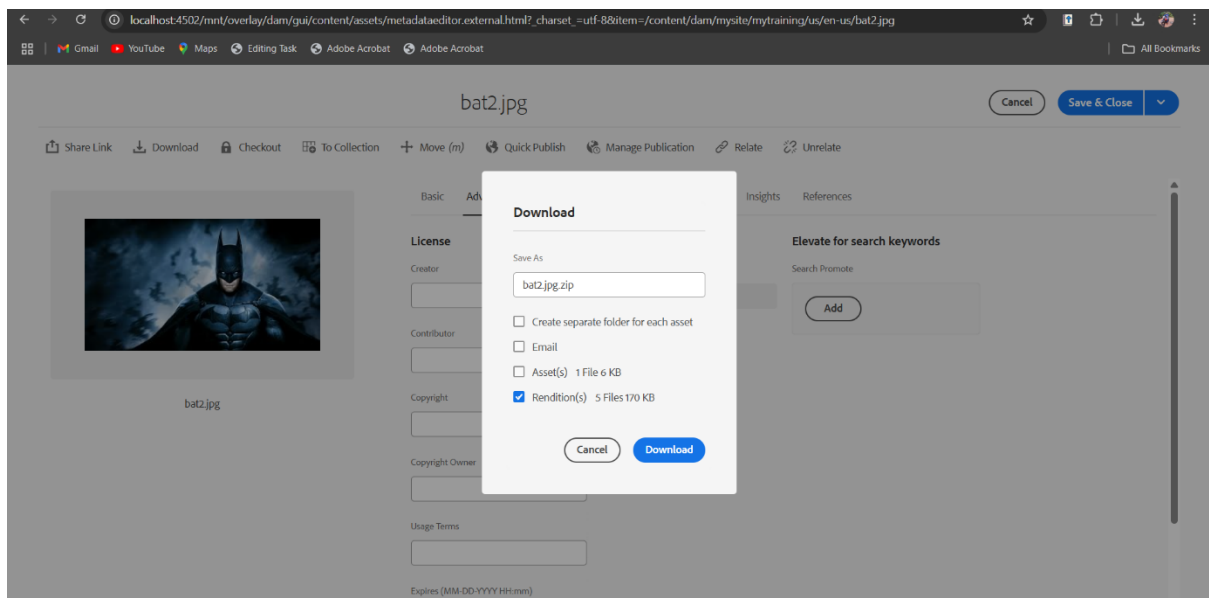
Akshai Krishna A
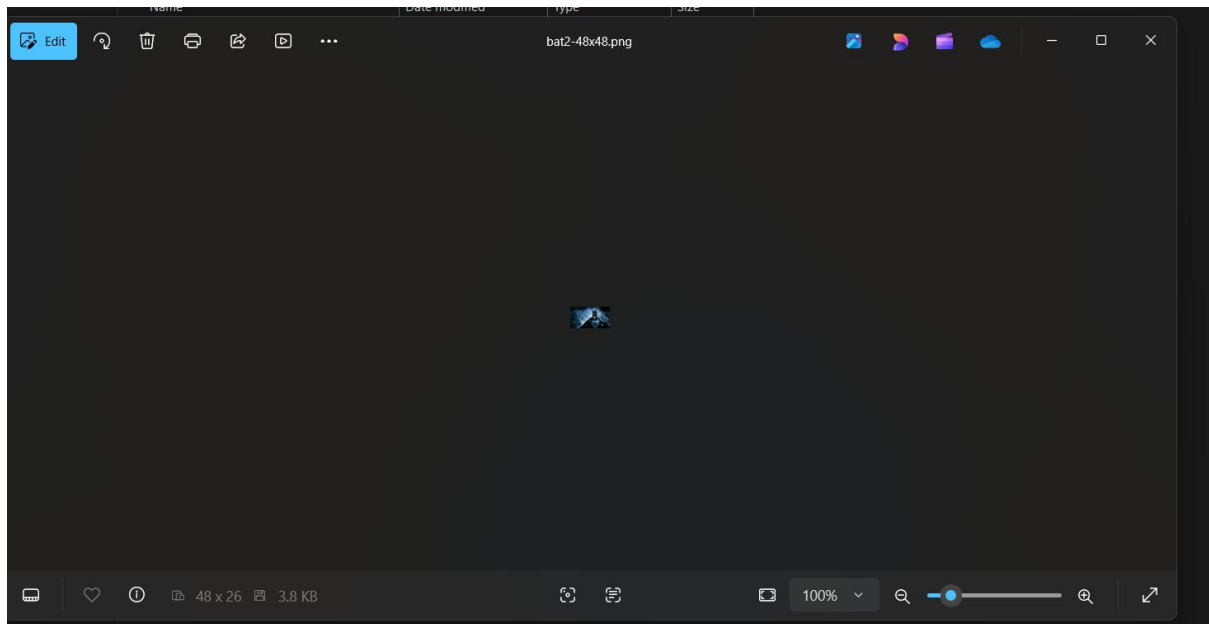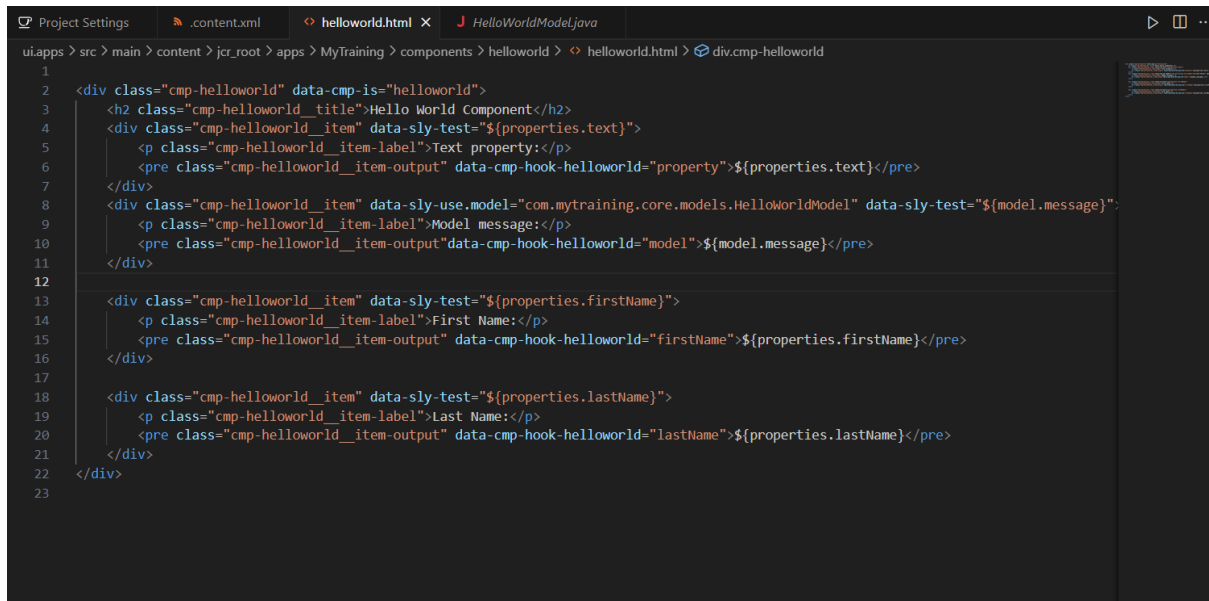
4. Add Two Fields (First Name and Last Name) to the HelloWorld Component

Changes in CQ dialog

Akshai Krishna A

Changes in helloworld.html

```html
<div class="cmp-helloworld" data-cmp-is="helloworld">
    <h2 class="cmp-helloworld__title">Hello World Component</h2>
    <div class="cmp-helloworld__item" data-sly-test="${properties.text}">
        <p class="cmp-helloworld__item-label">Text property:</p>
        <pre class="cmp-helloworld__item-output" data-cmp-hook-helloworld="property">${properties.text}</pre>
    </div>
    <div class="cmp-helloworld__item" data-sly-use.model="com.mytraining.core.models.HelloWorldModel" data-sly-test="${model.message}">
        <p class="cmp-helloworld__item-label">Model message:</p>
        <pre class="cmp-helloworld__item-output"data-cmp-hook-helloworld="model">${model.message}</pre>
    </div>

    <div class="cmp-helloworld__item" data-sly-test="${properties.firstName}">
        <p class="cmp-helloworld__item-label">First Name:</p>
        <pre class="cmp-helloworld__item-output" data-cmp-hook-helloworld="firstName">${properties.firstName}</pre>
    </div>

    <div class="cmp-helloworld__item" data-sly-test="${properties.lastName}">
        <p class="cmp-helloworld__item-label">Last Name:</p>
        <pre class="cmp-helloworld__item-output" data-cmp-hook-helloworld="lastName">${properties.lastName}</pre>
    </div>
</div>
```

6. Why Use Package Manager and Create JAR Packages?

The **Package Manager** in AEM helps in creating, managing, and deploying packages (like ZIP files) that contain your content, components, and configurations. It is used for:

- Exporting content from one AEM instance to another (e.g., from author to publish).

- Backing up important parts of your AEM instance.

- Ensuring that all necessary assets (like images and components) are included together.

Steps to Create Packages:

1. **Create Package for DAM (Images)**:

   o Go to **AEM Package Manager** at /crx/packmgr/index.jsp.

   o Click **Create Package**.

   o Name it something like myTraining-dam-images.

   o Under **Content**, add /content/dam/myTraining/us/en-us (where your images are stored).

Akshai Krishna A

o Build and download the package.

My_Training_DAM_Task_1-1.0.zip
Version: 1.0

Edit | Build | Install | Download   More ▾

Package:	My_Training_DAM_Task_1
Group:	com.mytraining
Filters:	

Akshai Krishna A
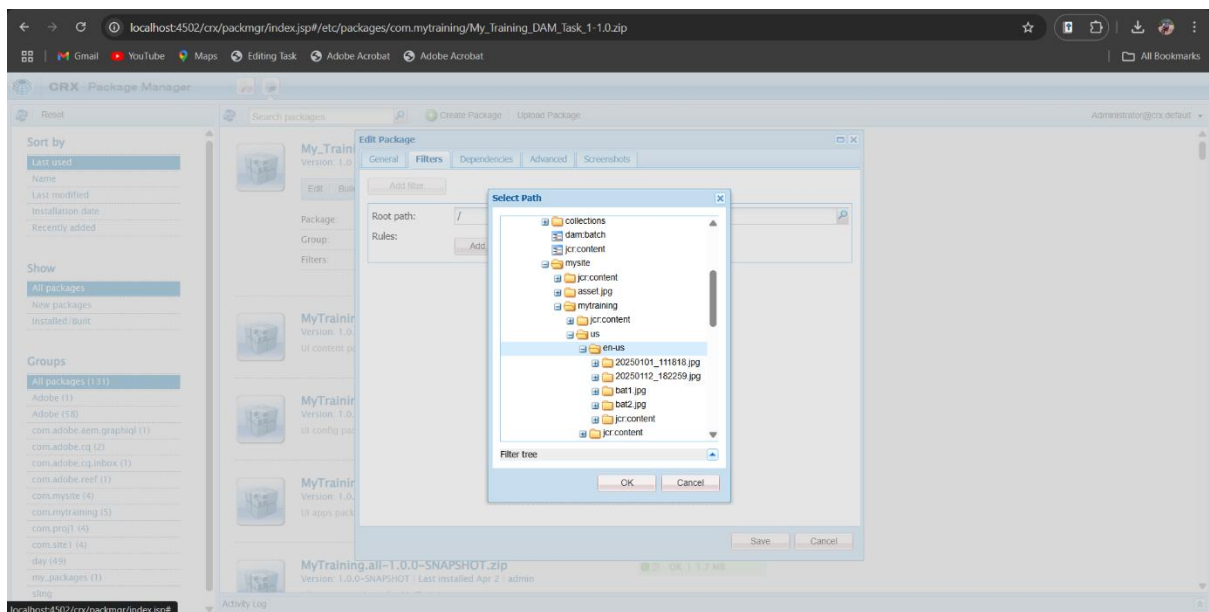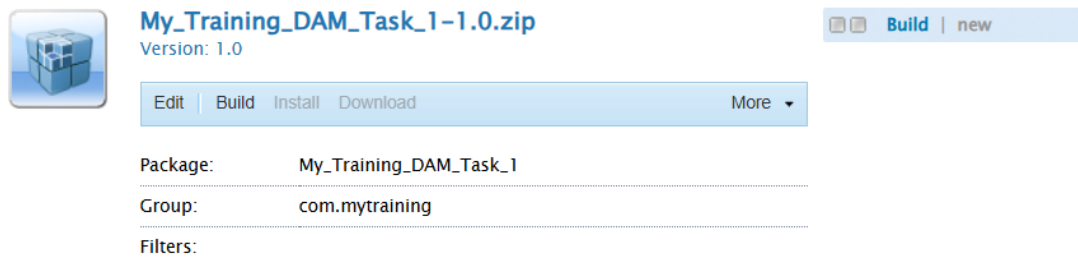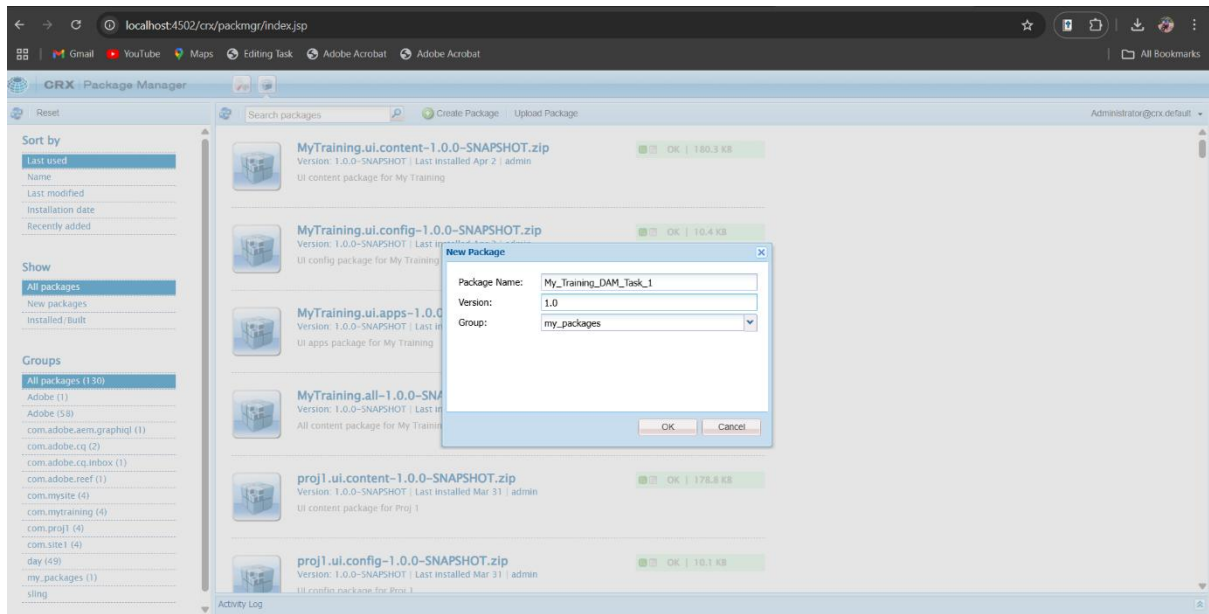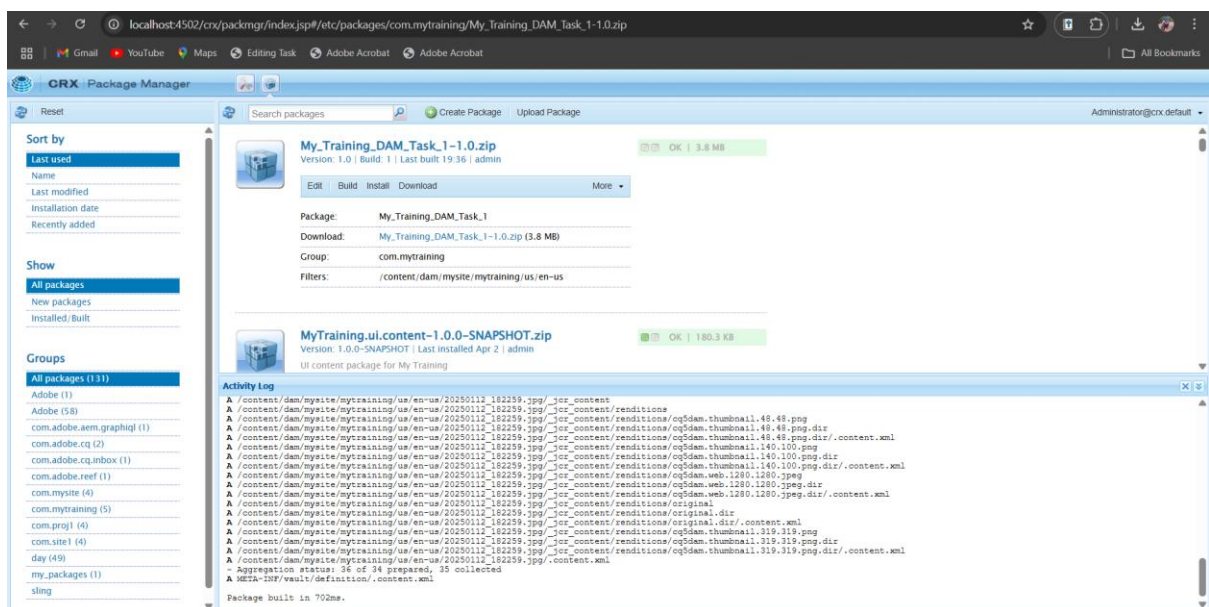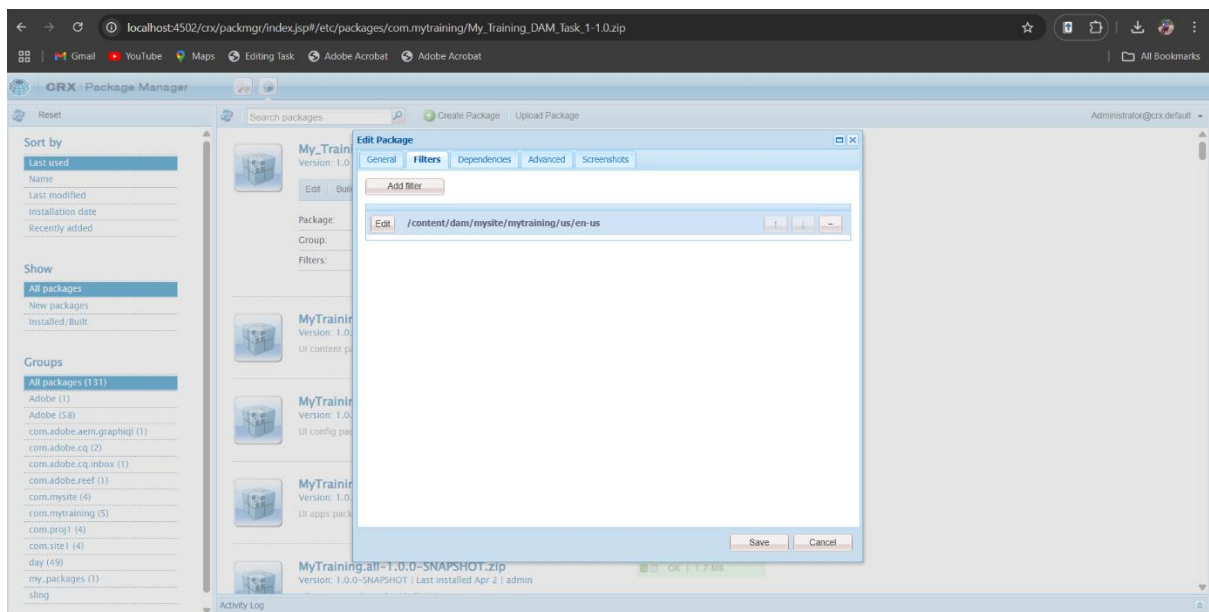
2. **Create Package for HelloWorld Component**:

   o Similarly, create another package for your component, selecting /apps/myTraining/components/helloworld.

Akshai Krishna A

Akshai Krishna A

Akshai Krishna A
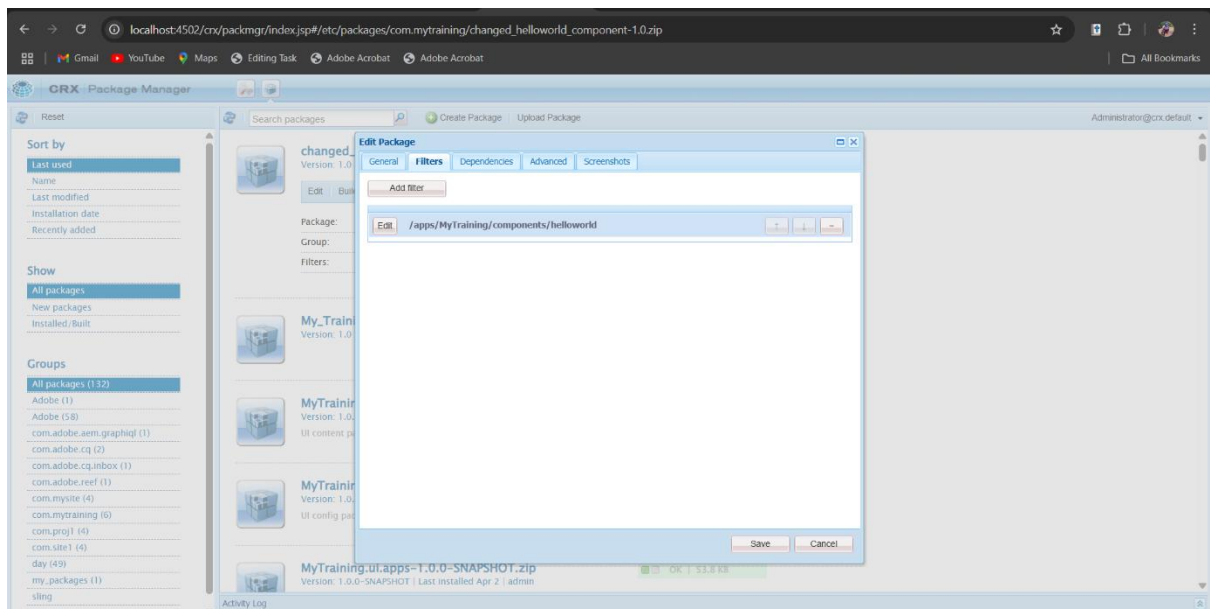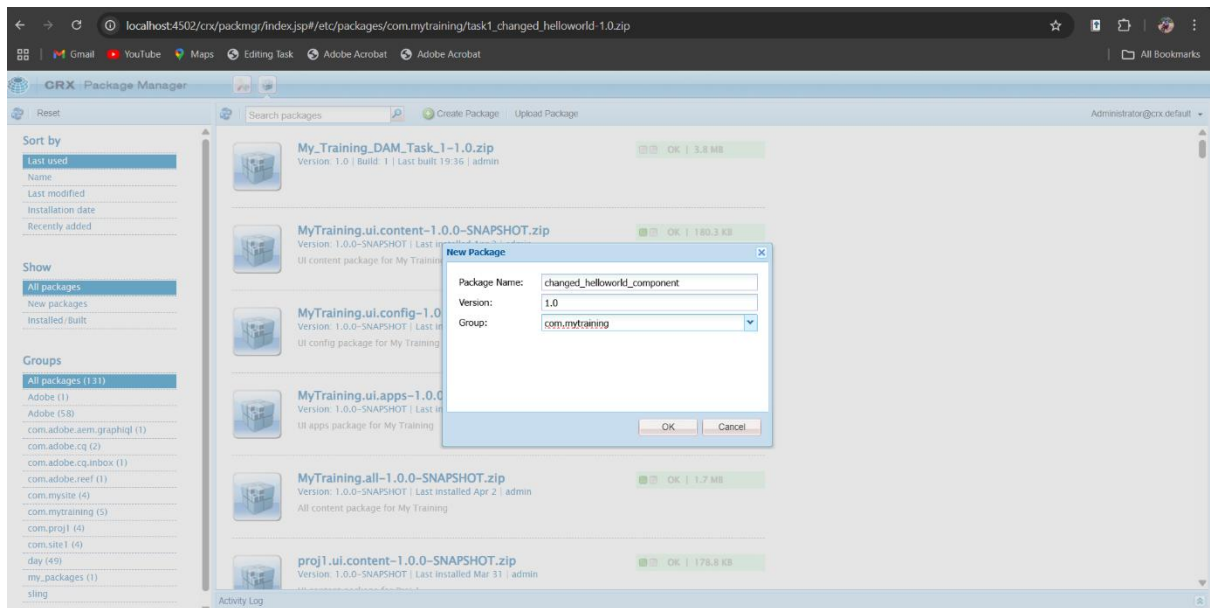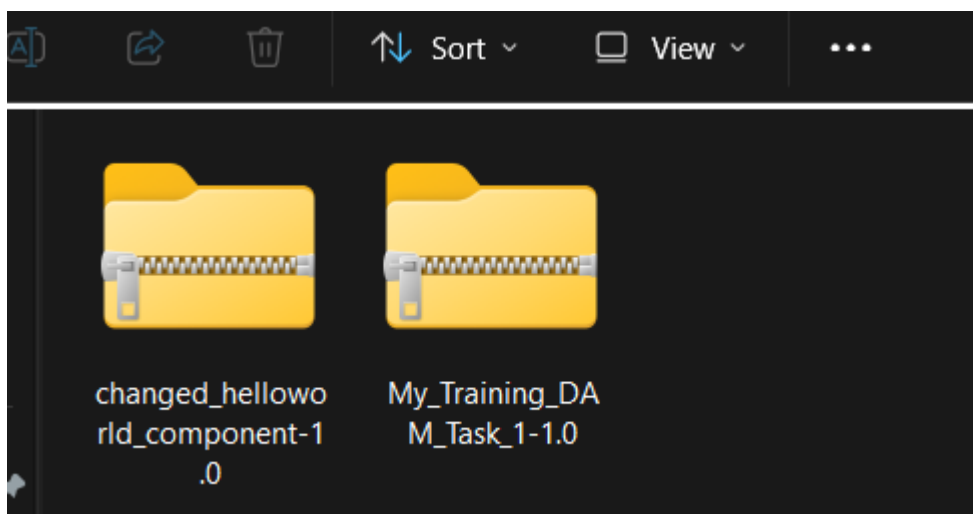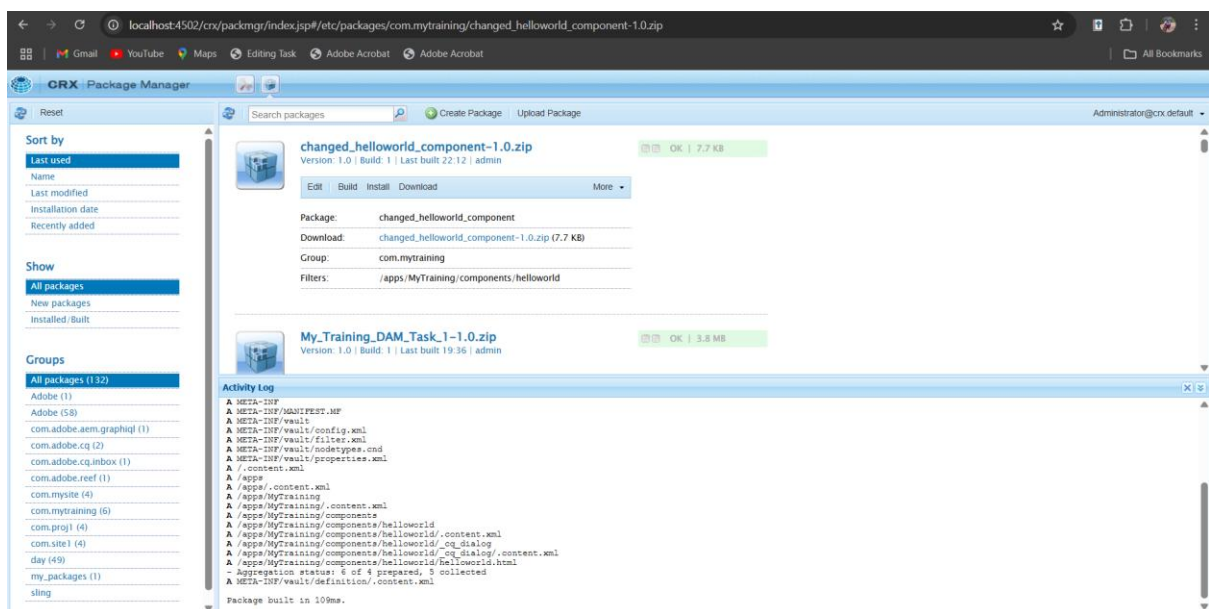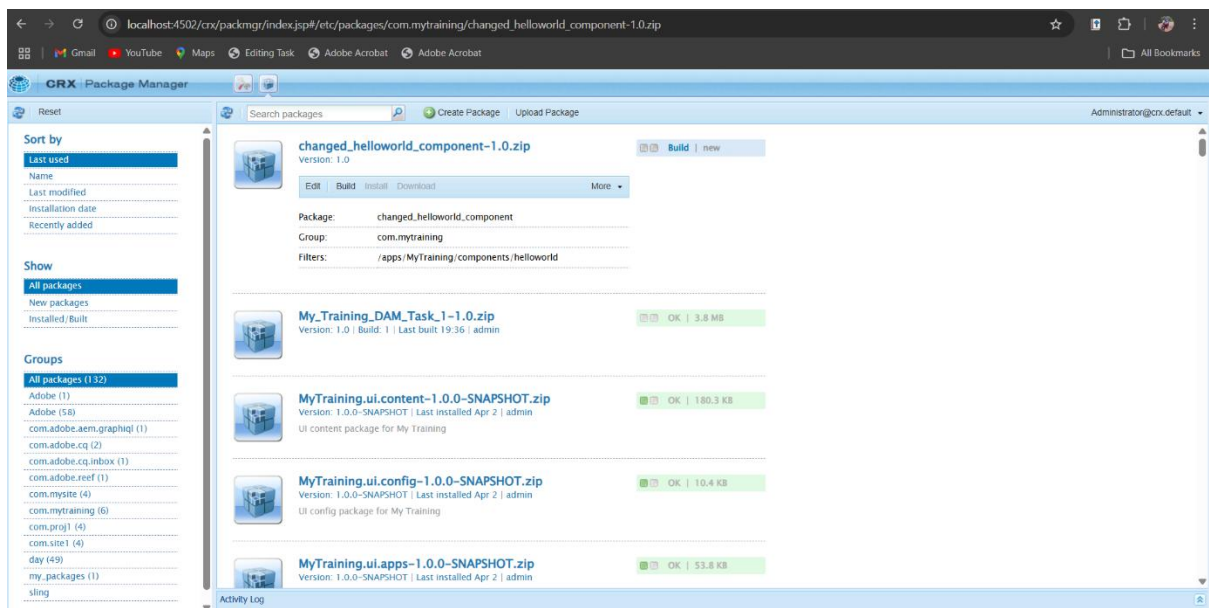
7. Configure Replication Agent and Publish the Page

To move content from the **author instance** (localhost:4502) to the **publish instance** (localhost:4503), you need to set up a **replication agent**.

Steps:

1. **Configure Replication Agent on Author**:

   o In AEM, go to **Tools** > **Deployment** > **Replication**.

   o Configure the **Publish Replication Agent**.

   o Set the **Publish URL** to http://localhost:4503/bin/replicate.

2. **Publish Page**:

   o On the author instance (http://localhost:4502), go to your page and click **Activate** (this triggers the replication process).

   o After activation, visit http://localhost:4503 to view the page on the publish instance.

Akshai Krishna A

Akshai Krishna A

Akshai Krishna A