**AEM Training - Day 7 Assignment (26-03-2025)**

**1. Create SampleServlet Extending SlingAllMethodsServlet:**
Create an AEM servlet that is registered using resourceType. This servlet will handle HTTP GET requests and log the execution.

**Code Snippet (SampleServlet.java):**

```java
@Component(service = Servlet.class, property = {

    "sling.servlet.resourceTypes=myapp/components/page",

    "sling.servlet.methods=GET"

})

public class SampleServlet extends SlingAllMethodsServlet {     private static

final Logger LOG = LoggerFactory.getLogger(SampleServlet.class);

    @Override     protected void doGet(SlingHttpServletRequest request,

SlingHttpServletResponse response)

throws ServletException, IOException {        response.getWriter().write("Sample

Servlet Executed");

        LOG.info("Sample Servlet Executed");

    } }
```

**2. Create CreatePageServlet Extending SlingSafeMethodsServlet:**
This servlet is registered using a specific path and is designed to create pages based on user input.

**Code Snippet (CreatePageServlet.java):**

```java
@Component(service = Servlet.class, property = {

    "sling.servlet.paths=/bin/createPage",

    "sling.servlet.methods=POST"

})

public class CreatePageServlet extends SlingSafeMethodsServlet {
```

```java
    @Reference    private ResourceResolverFactory resolverFactory;    @Override

    protected void doPost(SlingHttpServletRequest request, SlingHttpServletResponse response)
    throws ServletException, IOException {

        String pageName = request.getParameter("pageName");        try (ResourceResolver resolver
        = resolverFactory.getServiceResourceResolver(null)) {            PageManager pageManager =
        resolver.adaptTo(PageManager.class);            if (pageManager != null) {

            Page newPage = pageManager.create("/content/mysite", pageName,
            "/apps/myapp/templates/page", pageName);

            resolver.commit();            response.getWriter().write("Page created successfully:
            " + newPage.getPath());

            } else {

                response.getWriter().write("PageManager is null");

            }

        } catch (PersistenceException e) {            response.getWriter().write("Page
        creation failed: " + e.getMessage());

        }

    }
}
```

**3.Use PageManager API to Create Pages:**
This servlet demonstrates how to dynamically create pages using the PageManager API.

**Steps:**

1.  Retrieve the PageManager instance from the ResourceResolver.

2.  Call the create() method, passing the parent path, page name, template path, and title.

3.  Commit the changes using resolver.commit().

**Code Snippet:**

```java
PageManager pageManager = resolver.adaptTo(PageManager.class); if

(pageManager != null) {

    Page newPage = pageManager.create("/content/mysite", pageName,
"/apps/myapp/templates/page", pageName);

    resolver.commit();

}
```

4. **Create SearchServlet Using PredicateMap:**

This AEM servlet allows you to search for content using the QueryBuilder API and a PredicateMap.

**Code Snippet (SearchServlet.java):**

```java
@Component(service = Servlet.class, property = {

    "sling.servlet.paths=/bin/searchContent",

    "sling.servlet.methods=GET"

})

public class SearchServlet extends SlingSafeMethodsServlet {

    @Reference    private

QueryBuilder queryBuilder;

@Override

protected void doGet(SlingHttpServletRequest request, SlingHttpServletResponse response)
throws ServletException, IOException {

    Map<String, String> map = new HashMap<>();

map.put("path", "/content/mysite");        map.put("type",

"cq:Page");        map.put("p.limit",

"-1");

    Query query = queryBuilder.createQuery(PredicateGroup.create(map),

request.getResourceResolver().adaptTo(Session.class));        SearchResult result =
```

```
query.getResult();        for (Hit hit : result.getHits()) {

response.getWriter().write(hit.getPath() + "\n");

    }

  }

}
```
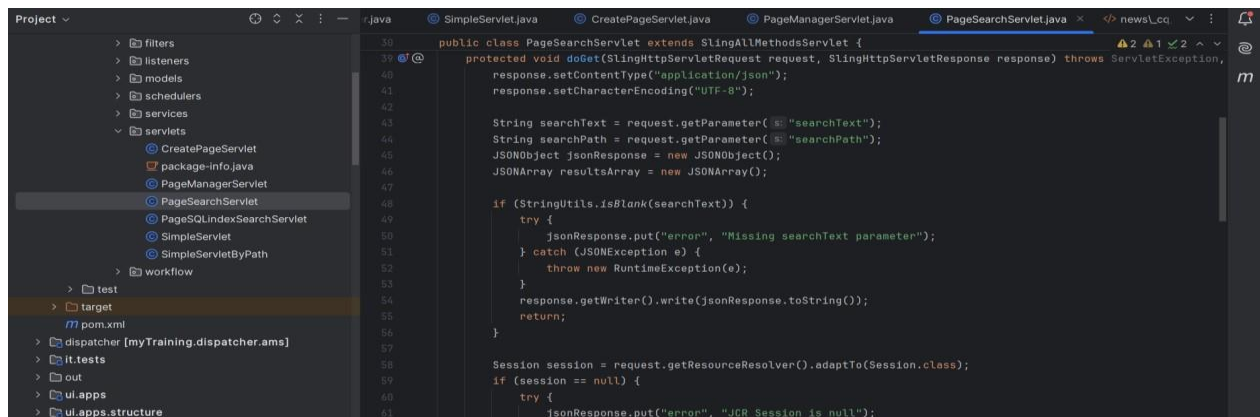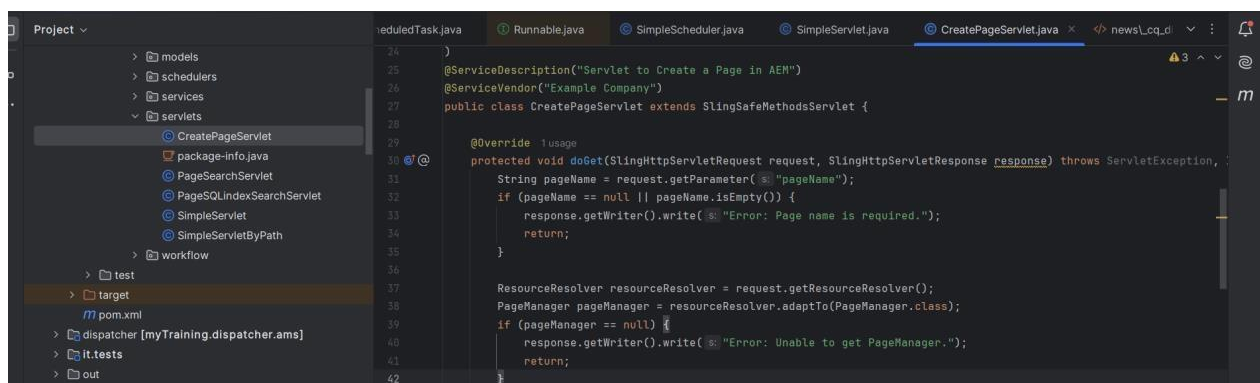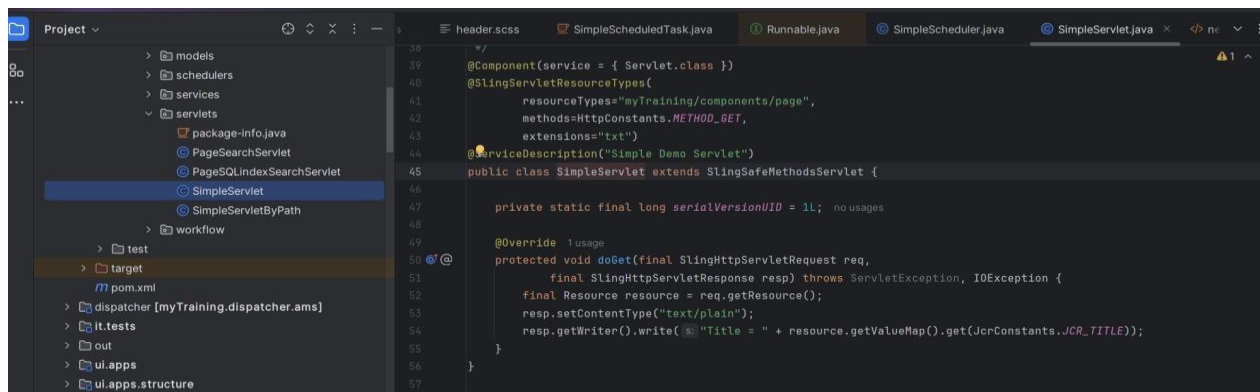
**Screenshots:**

Page created successfully: /content/myTraining/us/en/newPage

Adobe Experience Manager

en ∨

Select All   Create

| | Campaigns campaigns | | us | > | | en | > | | News news | > |
| | Outbound Marketing outbound-marketing | | | | | | | | newPage | |
| | myTraining | > | | | | | | | | |