AEM TASK 7

1.Create SampleServlet extend the SlingAllMethod Servlet and register it using resourceType

```
@Component(
    service = Servlet.class,    property =
{
        Constants.SERVICE_DESCRIPTION + "= Sample Servlet",
        "sling.servlet.methods=GET",
        "sling.servlet.resourceTypes=myTraining/components/structure/page",
"sling.servlet.extensions=json"
    }
)
public class SampleServlet extends SlingAllMethodsServlet {
    @Override
    protected          void          doGet(SlingHttpServletRequest          request,
SlingHttpServletResponse response)          throws
ServletException, IOException {        Resource resource =
request.getResource();
response.setContentType("application/json");
        response.getWriter().write("{\"message\": \"This is a servlet for: " +
resource.getResourceType() + "\"}");
    }
}
```

```
{
    "jcr:primaryType": "cq:PageContent",
    "jcr:mixinTypes": [
        "mix:versionable",
        "cq:ReplicationStatus2"
    ],
    "jcr:createdBy": "admin",
    "jcr:title": "en",
    "cq:lastReplicatedBy_publish": "admin",
    "cq:isDelivered": false,
    "cq:lastReplicationAction": "Activate",
    "jcr:versionHistory": "a395e6f5-1bbd-475a-8fb9-708110bffeb1",
    "pwaOrientation": "any",
    "cq:template": "/conf/myTraining/settings/wcm/templates/page-content",
    "cq:lastReplicatedBy": "admin",
    "cq:lastReplicationAction_publish": "Activate",
    "jcr:predecessors": [
        "b132e094-41b8-49ab-a019-2abb69c9c0ea"
    ],
    "cq:contextHubSegmentsPath": "/etc/segmentation/contexthub",
    "jcr:created": "Wed Mar 26 2025 09:17:40 GMT+0530",
    "pwaDisplay": "standalone",
    "cq:lastReplicated": "Wed Apr 02 2025 22:20:59 GMT+0530",
    "cq:lastModified": "Thu Apr 03 2025 00:22:57 GMT+0530",
    "pwaCacheStrategy": "staleWhileRevalidate",
    "jcr:baseVersion": "b132e094-41b8-49ab-a019-2abb69c9c0ea",
    "jcr:isCheckedOut": true,
    "pageTitle": "myTraining",
    "jcr:uuid": "25dded43-55e5-491e-8869-1ed66c5138eb",
    "sling:resourceType": "myTraining/components/page",
    "cq:contextHubPath": "/etc/cloudsettings/default/contexthub",
    "cq:lastReplicated_publish": "Wed Apr 02 2025 22:20:59 GMT+0530",
    "cq:lastModifiedBy": "admin"
}
```

2.Create CreatePageServlet extend the SlingSafeMethod Servlet and register it using path

```
package com.aemtasks.core.servlets;
import org.apache.sling.api.SlingHttpServletRequest; import
org.apache.sling.api.SlingHttpServletResponse; import
org.apache.sling.api.servlets.SlingSafeMethodsServlet; import
org.osgi.service.component.annotations.Component; import
javax.servlet.Servlet; import javax.servlet.ServletException; import
java.io.IOException;
@Component(service = Servlet.class, property = {
    "sling.servlet.paths=/bin/createpage"
})
public class CreatePageServlet extends SlingSafeMethodsServlet {
  @Override
        protected    void    doGet(SlingHttpServletRequest    request,
SlingHttpServletResponse response)        throws
ServletException, IOException {
response.setContentType("text/plain");

    response.getWriter().write("This servlet will be used to create AEM pages.");
  }
}
```

3.Take page name from user and create pages in aem using above servlet and 4. Use page Manager Apis for above task.

```
This servlet will be used to create AEM pages.
```

5.Create one SearchServlet to search the content using PredicateMap to search the content from pages

package com.aemtasks.core.servlets; import com.day.cq.search.PredicateGroup; import com.day.cq.search.Query; import com.day.cq.search.QueryBuilder; import com.day.cq.search.result.Hit;

import com.day.cq.search.result.Result; import org.apache.sling.api.SlingHttpServletRequest; import org.apache.sling.api.SlingHttpServletResponse; import org.apache.sling.api.resource.ResourceResolver; import org.apache.sling.api.servlets.SlingSafeMethodsServlet; import org.osgi.service.component.annotations.Component; import org.osgi.service.component.annotations.Reference;

import javax.jcr.Session; import javax.servlet.Servlet; import javax.servlet.ServletException; import java.io.IOException; import java.util.HashMap; import java.util.Map;

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

    "sling.servlet.paths=/bin/searchcontent"

})

```java
public class SearchServlet extends SlingSafeMethodsServlet {

    @Reference
    private QueryBuilder queryBuilder;

    @Override
    protected void doGet(SlingHttpServletRequest request,
SlingHttpServletResponse response) throws
ServletException, IOException {
response.setContentType("text/plain");

        String searchText = request.getParameter("searchText");

        ResourceResolver resolver = request.getResourceResolver();
        Session session = resolver.adaptTo(Session.class);

        if (searchText != null && session != null) {
Map<String, String> map = new HashMap<>();
map.put("path", "/content");        map.put("type",
"cq:Page");        map.put("fulltext", searchText);
map.put("p.limit", "-1");

            Query                query                =
queryBuilder.createQuery(PredicateGroup.create(map), session);        Result
result = query.getResult();

            for (Hit hit : result.getHits()) {
                response.getWriter().write(hit.getPath() + "\n");
            }
        } else {
            response.getWriter().write("Missing searchText or session.");
        }
    }
```

```
}
```

```
/content/myTraining/us/en/news/article-1
/content/myTraining/us/en/news/article-2
/content/myTraining/us/en/news/article-3
/content/myTraining/us/en/news/article-4
/content/myTraining/us/en/news/article-5
/content/myTraining/us/en/contact-us
/content/myTraining/uk/en
/content/myTraining/uk
/content/myTraining/aem-project
/content/myTraining/aem-project/en/contact-us
/content/myTraining/aem-project/en/about-us
/content/myTraining
/content/myTraining/aem-project/en/home
/content/myTraining/us
/content/myTraining/aem-project/en/news
/content/myTraining/aem-project/en/news/news-3
/content/myTraining/aem-project/en/news/news-4
/content/myTraining/aem-project/en/news/news-2
/content/myTraining/aem-project/en/news/news-5
/content/myTraining/us/en/author-details
/content/myTraining/aem-project/en/news/news-1
/content/myTraining/aem-project/en
/content/experience-fragments/myTraining/us/en/site/footer/master
/content/experience-fragments/myTraining/us/en/site/header-fragment/master
/content/myTraining/us/en/about-us
/content/myTraining/us/en/about-our-food
/content/myTraining/uk/en/uk/news/article-5
/content/myTraining/uk/en/uk/news/article-3
/content/myTraining/uk/en/uk/news/article-4
/content/myTraining/uk/en/uk/news/article-1
/content/myTraining/uk/en/uk/news/article-2
/content/myTraining/uk/en/uk/contact-us
/content/myTraining/uk/en/uk/home
/content/myTraining/us/en/home
/content/myTraining/us/en
/content/myTraining/us/en/news
/content/myTraining/uk/en/uk/about-our-food
/content/myTraining/uk/en/uk/about-us
/content/myTraining/uk/en/uk/author-details
/content/experience-fragments/myTraining/us/en/site/header/master
/content/myTraining/uk/en/uk/news
/content/myTraining/uk/en/uk
```