Task-11 CODE

QUESTION

1) When you create any page in the project, you should trigger the event handler. After that, you should trigger the workflow, and it should add the Expirydate property to that page's jcr:content, with the value being the current date and time.

ANSWER :

EVENT HANDLER FOR CREATING PAGE WORKFLOW STARTED

```
package com.adobe.aem.guides.demo.core.listeners;

import java.util.HashMap;
import java.util.Map;

import javax.jcr.Session;

import org.apache.sling.api.resource.LoginException;
import org.apache.sling.api.resource.Resource;
import org.apache.sling.api.resource.ResourceResolver;
import org.apache.sling.api.resource.ResourceResolverFactory;
import org.osgi.service.component.annotations.Component;
import org.osgi.service.component.annotations.Reference;
import org.osgi.service.event.Event;
import org.osgi.service.event.EventConstants;
import org.osgi.service.event.EventHandler;
import org.slf4j.Logger;
import org.slf4j.LoggerFactory;

import com.day.cq.workflow.WorkflowException;
import com.day.cq.workflow.WorkflowService;
import com.day.cq.workflow.WorkflowSession;
import com.day.cq.workflow.exec.WorkflowData;
import com.day.cq.workflow.model.WorkflowModel;

@Component(service = EventHandler.class, immediate = true,
  property = {
     EventConstants.EVENT_TOPIC + "=org/apache/sling/api/resource/Resource/ADDED"
  }
```

```
)
public class PageCreation implements EventHandler {
  private static final Logger log = LoggerFactory.getLogger(PageCreation.class);

  @Reference
  private WorkflowService workflowService;

  @Reference
  private ResourceResolverFactory resolverFactory;



  @Override
  public void handleEvent(Event event) {
    log.info("Page creation event triggered");
    handleResourceAddedEvent(event);
  }

  private void handleResourceAddedEvent(Event event) {
          String path = (String) event.getProperty("path");

//      log.info("Resource added at path: {}", path);

    ResourceResolver resourceResolver = null;
    try {
      Map<String, Object> param = new HashMap<>();
      param.put(ResourceResolverFactory.SUBSERVICE, "hemanth");
      resourceResolver = resolverFactory.getServiceResourceResolver(param);
      Resource resource = resourceResolver.getResource(path);

      if (resource != null && resource.isResourceType("cq:Page")) {
        log.info("Page created at path: {}", path);
        startWorkflow(path);
      }
    } catch (LoginException e) {
      log.error("Error obtaining resource resolver", e);
    } finally {
      if (resourceResolver != null) {
        resourceResolver.close();
      }
    }
  }
```

```
  private void startWorkflow(String payloadPath) {
    Map<String, Object> param = new HashMap<>();
    param.put(ResourceResolverFactory.SUBSERVICE, "hemanth");
    try (ResourceResolver resolver = resolverFactory.getServiceResourceResolver(param)) {
      Session session = resolver.adaptTo(Session.class);
      WorkflowSession workflowSession = workflowService.getWorkflowSession(session);
      String workflowModelPath = "/var/workflow/models/HemanthModel"; // Replace with
your workflow model path
      WorkflowModel workflowModel = workflowSession.getModel(workflowModelPath);
      WorkflowData workflowData = workflowSession.newWorkflowData("JCR_PATH",
payloadPath);
      workflowSession.startWorkflow(workflowModel, workflowData);
      log.info("Workflow started for payload: {}", payloadPath);
    } catch (LoginException e) {
      log.error("LoginException while starting workflow", e);
    } catch (WorkflowException e) {
      log.error("WorkflowException while starting workflow", e);
    } catch (Exception e) {
      log.error("Exception while starting workflow", e);
    }
  }
}
```

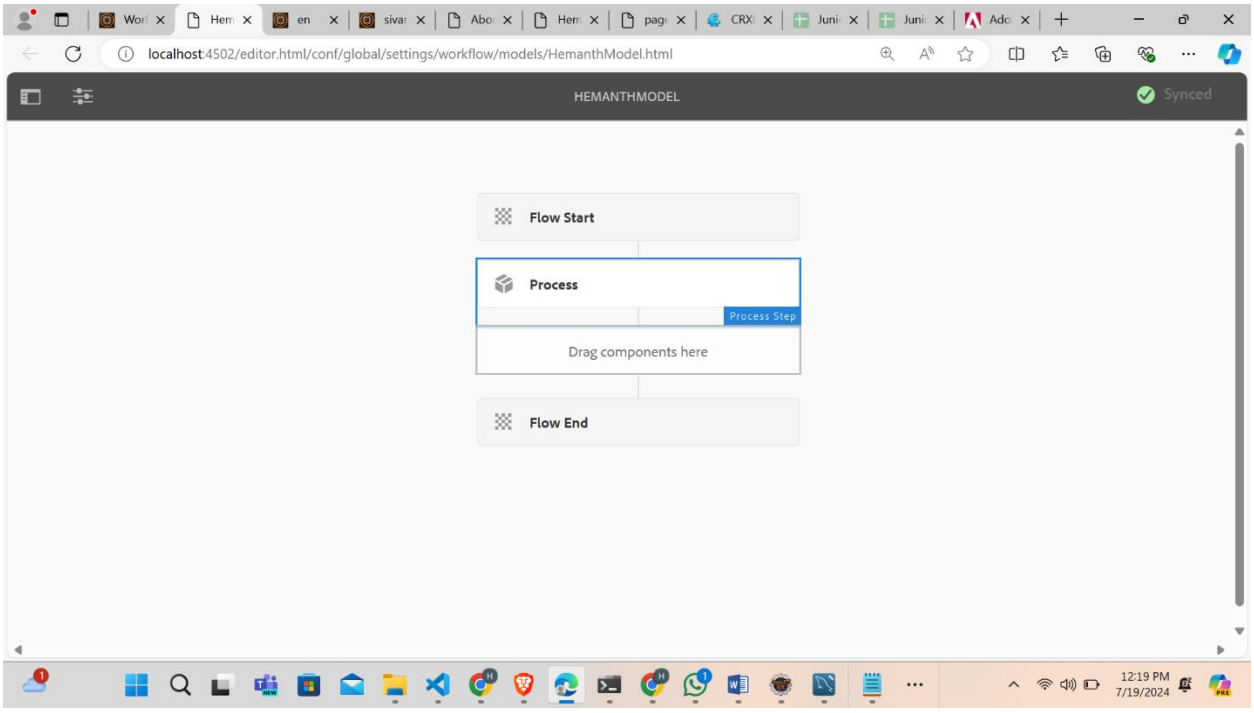
ADD PROPERTY THROUGH WORKFLOW

```
package workflow;

import java.util.Calendar;

import java.util.HashMap;

import java.util.Map;

import javax.jcr.Node;

import javax.jcr.Session;

import org.apache.sling.api.resource.LoginException;

import org.apache.sling.api.resource.PersistenceException;

import org.apache.sling.api.resource.ResourceResolver;

import org.apache.sling.api.resource.ResourceResolverFactory;

import org.osgi.service.component.annotations.Component;

import org.osgi.service.component.annotations.Reference;
```

```
import org.slf4j.Logger;
import org.slf4j.LoggerFactory;
import com.adobe.granite.workflow.WorkflowSession;
import com.adobe.granite.workflow.exec.WorkItem;
import com.adobe.granite.workflow.exec.WorkflowProcess;
import com.adobe.granite.workflow.metadata.MetaDataMap;

@Component(service = WorkflowProcess.class, property = {"process.label=Page Created"})
public class PagecreatedWorkflow implements WorkflowProcess {
   private static final Logger log = LoggerFactory.getLogger(PagecreatedWorkflow.class);
   @Reference
   private ResourceResolverFactory resolverFactory;
   @Override
   public void execute(WorkItem workItem, WorkflowSession workflowSession,
MetaDataMap metaDataMap) {
      String payloadPath = workItem.getWorkflowData().getPayload().toString();
      ResourceResolver resourceResolver = null;
      try {
         // Using service user to obtain resource resolver
         Map<String, Object> param = new HashMap<>();
         param.put(ResourceResolverFactory.SUBSERVICE, "hemanth");
         resourceResolver = resolverFactory.getServiceResourceResolver(param);

         Session session = resourceResolver.adaptTo(Session.class);
         Node pageNode = session.getNode(payloadPath);

         if (pageNode != null && pageNode.hasNode("jcr:content")) {
```

```
            Node contentNode = pageNode.getNode("jcr:content");
            Calendar currentDate = Calendar.getInstance();
            contentNode.setProperty("expired", currentDate);
            session.save();
            log.info("Property 'expired' added to jcr:content of page at {}", payloadPath);
        } else {
            log.warn("jcr:content node not found for page at {}", payloadPath);
        }
    } catch (Exception e) {
        log.error("Error adding property to jcr:content of page at {}", payloadPath, e);
        throw new RuntimeException(e);
    } finally {
        if (resourceResolver != null) {
            resourceResolver.close();
        }
    }}}
```

WORKFLOW PROCESS STEP



ADD PROPERTY ON CRXDE