Task-9 CODE

HANDLER CODE

```
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.ModifiableValueMap;
import org.apache.sling.api.resource.PersistenceException;
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.replication.ReplicationAction;
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 + "=" + ReplicationAction.EVENT_TOPIC
   }
)
public class HemanthHandlerJuly implements EventHandler {
   private static final Logger log = LoggerFactory.getLogger(HemanthHandlerJuly.class);

   @Reference
   private WorkflowService workflowService;
```

```
    @Reference
    private ResourceResolverFactory resolverFactory;

    @Override
    public void handleEvent(Event event) {
        log.info("Handle my trigger");
        handleReplicationEvent(event);
    }

    private void handleReplicationEvent(Event event) {
        ReplicationAction action = ReplicationAction.fromEvent(event);
        String path = action.getPath();
        log.info("Content activated at path: {}", path);
        startWorkflow(path);
//        addPropertyToPage(path);
    }

    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/sivamodel"; // 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);
        }
    }

    private void addPropertyToPage(String pagePath) {
        Map<String, Object> param = new HashMap<>();
        param.put(ResourceResolverFactory.SUBSERVICE, "hemanth");
        try (ResourceResolver resolver = resolverFactory.getServiceResourceResolver(param)) {
            String jcrContentPath = pagePath + "/jcr:content";
```

```
            Resource resource = resolver.getResource(jcrContentPath);
            if (resource != null) {
                ModifiableValueMap properties = resource.adaptTo(ModifiableValueMap.class);
                if (properties != null) {
                    properties.put("changed", true);
                    resolver.commit();
                    log.info("Property 'changed' set to true for: {}", jcrContentPath);
                }
            } else {
                log.warn("Resource not found at path: {}", jcrContentPath);
            }
        } catch (LoginException e) {
            log.error("LoginException while adding property", e);
        } catch (PersistenceException e) {
            log.error("PersistenceException while adding property", e);
        } catch (Exception e) {
            log.error("Exception while adding property", e);
        }
    }
}
```

WORKFLOW PROCESS CODE

```
package workflow;


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.aem.guides.demo.core.service.EmailService;

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=Send Email Process"})
public class Workflow implements WorkflowProcess {
        private static final Logger log = LoggerFactory.getLogger(Workflow.class);
         @Reference
          private EmailService emailService;

          @Override
          public void execute(WorkItem workItem, WorkflowSession workflowSession, MetaDataMap args) {
              try {
                  log.info("this is process step by hemanth");
                 String pagePath = workItem.getWorkflowData().getPayload().toString();
                 emailService.sendEmail("hemanth.nellori@gmail", "Page Published", "A page has been published: " + pagePath);
              } catch (Exception e) {
                 e.printStackTrace();
              }
          }
}
```

SERVICE CODE

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

import org.osgi.service.component.annotations.Component;
import javax.mail.*;
import javax.mail.internet.*;
import java.util.Properties;

@Component(immediate = true, service = EmailService.class)
public class EmailService {
```

```
    public void sendEmail(String to, String subject, String body) throws MessagingException {
        String from = "hnellori@gmail.com";
        final String username = "hemanth";
        final String password = "hemanth$123456";
        String host = "smtp.example.com";

        Properties props = new Properties();
        props.put("mail.smtp.auth", "true");
        props.put("mail.smtp.starttls.enable", "true");
        props.put("mail.smtp.host", host);
        props.put("mail.smtp.port", "465");

        Session session = Session.getInstance(props, new javax.mail.Authenticator() {
            protected PasswordAuthentication getPasswordAuthentication() {
                return new PasswordAuthentication(username, password);
            }
        });

        Message message = new MimeMessage(session);
        message.setFrom(new InternetAddress(from));
        message.setRecipients(Message.RecipientType.TO, InternetAddress.parse(to));
        message.setSubject(subject);
        message.setText(body);

        Transport.send(message);
    }
}
```

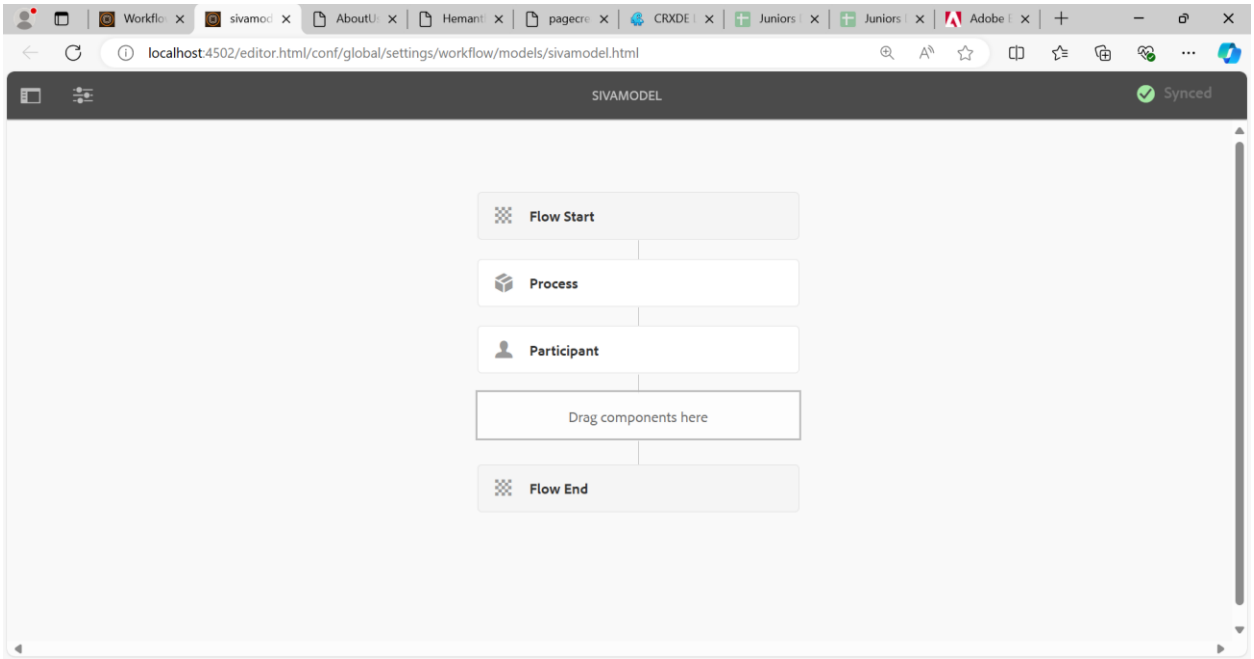
EMAIL TEST SERVLET CODE

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

import java.util.Properties;
import javax.mail.Authenticator;
import javax.mail.Message;
import javax.mail.MessagingException;
import javax.mail.PasswordAuthentication;
import javax.mail.Session;
import javax.mail.Transport;
```

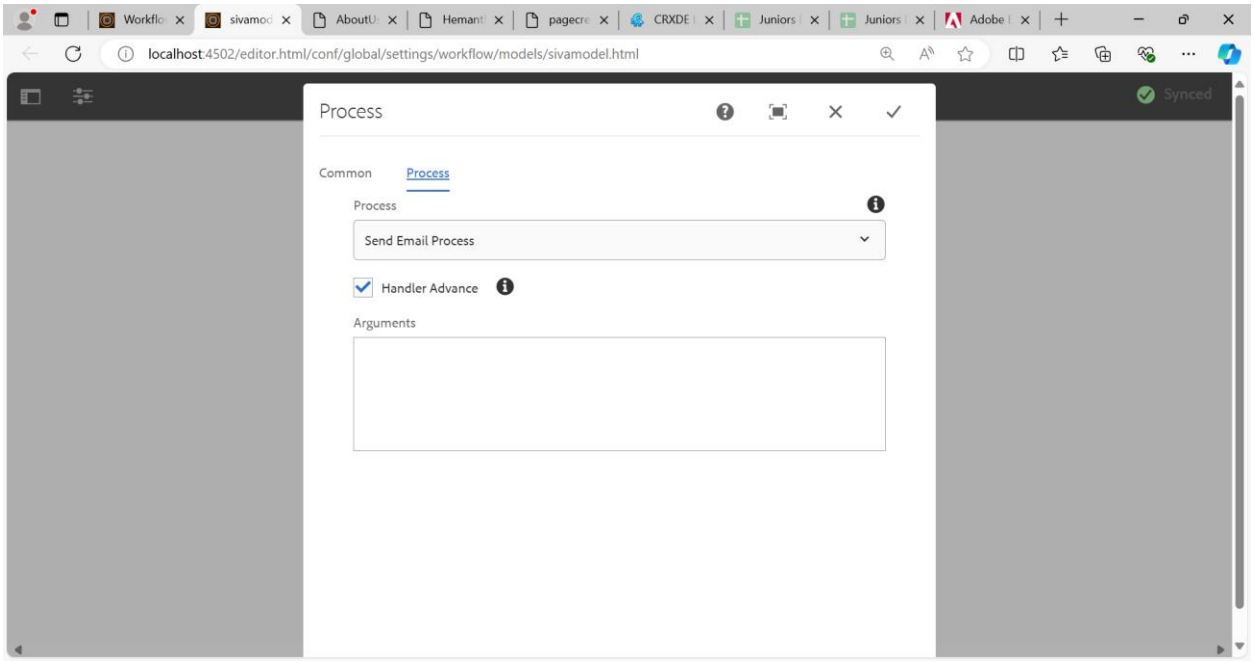
```
import javax.mail.internet.InternetAddress;
import javax.mail.internet.MimeMessage;

public class Email {
   public static void main(String[] args) {
      // SMTP server details
      String smtpHost = "smtp.gmail.com"; // Replace with your SMTP server
      int smtpPort = 587; // Replace with the port of your SMTP server
      final String username = "hemanthsainellori@gmail.com"; // Replace with your email
address
      final String password = "yofmzgflukuqojtr"; // Replace with your email password

      // Sender's email address
      String fromEmail = "hemanthsainellori@gmail.com"; // Replace with your email address

      // Recipient's email address
      String toEmail = "hnellori@gmail.com"; // Replace with recipient's email address

      // Set properties
      Properties props = new Properties();
      props.put("mail.smtp.auth", "true");
      props.put("mail.smtp.starttls.enable", "true");
      props.put("mail.smtp.host", smtpHost);
      props.put("mail.smtp.port", smtpPort);

      // Create session
      Session session = Session.getInstance(props, new Authenticator() {
         protected PasswordAuthentication getPasswordAuthentication() {
            return new PasswordAuthentication(username, password);
         }
      });

      try {
         // Create a default MimeMessage object
         Message message = new MimeMessage(session);

         // Set From: header field of the header
         message.setFrom(new InternetAddress(fromEmail));

         // Set To: header field of the header
         message.setRecipients(Message.RecipientType.TO, InternetAddress.parse(toEmail));

         // Set Subject: header field
         message.setSubject("Testing JavaMail");
```

```
            // Now set the actual message
            message.setText("Hello, this is a test message from JavaMail.");

            // Send message
            Transport.send(message);

            System.out.println("Email sent successfully!");

        } catch (MessagingException e) {
            throw new RuntimeException(e);
        }
    }
}
```

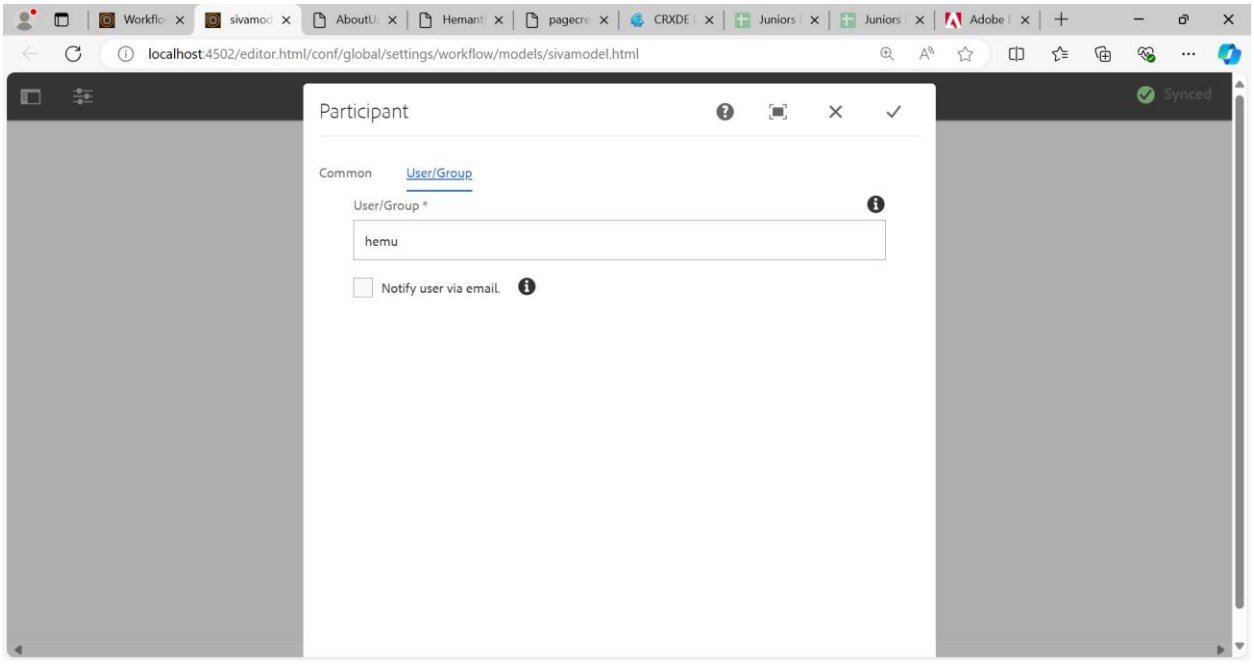
WORKFLOWMODEL



WORKFLOWMODEL PROCESS STEP



WORKFLOW PARTICIPANT STEP



DQ CQ MAIL SERVICE