

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.");

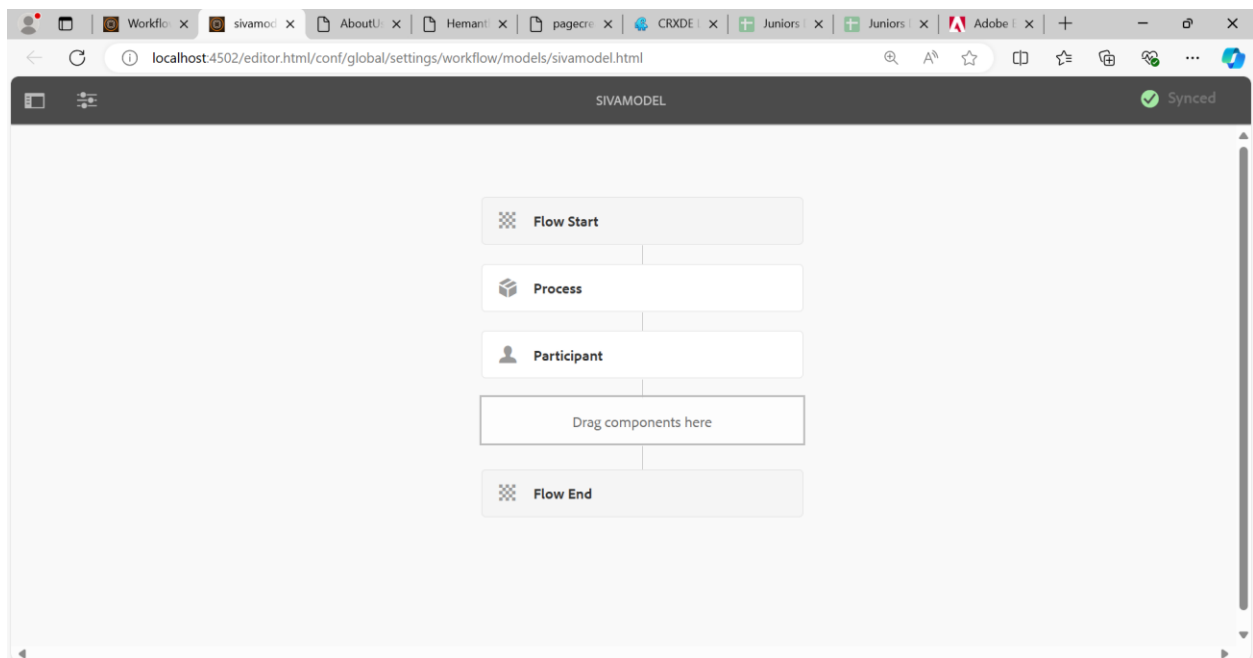
// Send message
Transport.send(message);

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

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

```

WORKFLOWMODEL



WORKFLOWMODEL PROCESS STEP

The screenshot shows a web browser window with the URL `localhost:4502/editor.html/conf/global/settings/workflow/models/sivamodel.html`. The browser's tab bar includes 'Workflo', 'sivamod', 'AboutU', 'Hemanit', 'pagecre', 'CRXDE', 'Juniors', and 'Adobe'. The main content area displays a 'Process' configuration dialog. The dialog has a title bar with a question mark, a close button, and a checkmark. It features a 'Common' tab and a 'Process' sub-tab. The 'Process' section contains a dropdown menu with 'Send Email Process' selected. Below this is a checked checkbox for 'Handler Advance'. The 'Arguments' section is an empty text area. A 'Synced' status indicator is visible in the top right corner of the dialog.

Process

Common [Process](#)

Process

Send Email Process

☒ Handler Advance

Arguments

Synced

WORKFLOW PARTICIPANT STEP

The screenshot shows the same web browser window as the previous one. The main content area displays a 'Participant' configuration dialog. The dialog has a title bar with a question mark, a close button, and a checkmark. It features a 'Common' tab and a 'User/Group' sub-tab. The 'User/Group' section contains a text input field with the value 'hemu'. Below this is an unchecked checkbox for 'Notify user via email'. A 'Synced' status indicator is visible in the top right corner of the dialog.

Participant

Common [User/Group](#)

User/Group *

hemu

☐ Notify user via email

Synced

DQ CQ MAIL SERVICE

The mail service can be used to send emails.

SMTP server host name	<input type="text" value="smtp.gmail.com"/>	The mailer uses this SMTP server to send messages (smtp.host)
SMTP server port	<input type="text" value="587"/>	Port number to use to connect to the SMTP server (smtp.port)
SMTP user	<input type="text" value="sivasai.kandukuri@surgesoftware.co.in"/>	The user for authentication through SMTP (smtp.user)
SMTP password	<input type="password" value="*****"/>	The password for authentication through SMTP. The password can either be provided plain text, or crypted via the Crypto Support feature (Main -> Crypto Support menu) (smtp.password)
"From" address	<input type="text" value="sivasai.kandukuri@surgesoftware.co.in"/>	The email address to use in the "From:" field of messages sent by the mailer (from.address)
SMTP use SSL	<input type="checkbox"/>	If enabled, an SSL connection is set up. (smtp.ssl)
SMTP use StartTLS	<input checked="" type="checkbox"/>	If enabled, TLS connection is started. (smtp.starttls)
Debug email	<input type="checkbox"/>	If enabled, interactions with the SMTP server are dumped to the operating system terminal that runs Sling (debug.email)
OAuth Flow	<input checked="" type="checkbox"/>	If enabled, Interaction will use OAuth2 mechanism to send mails. (oauth.flow)

Configuration Information