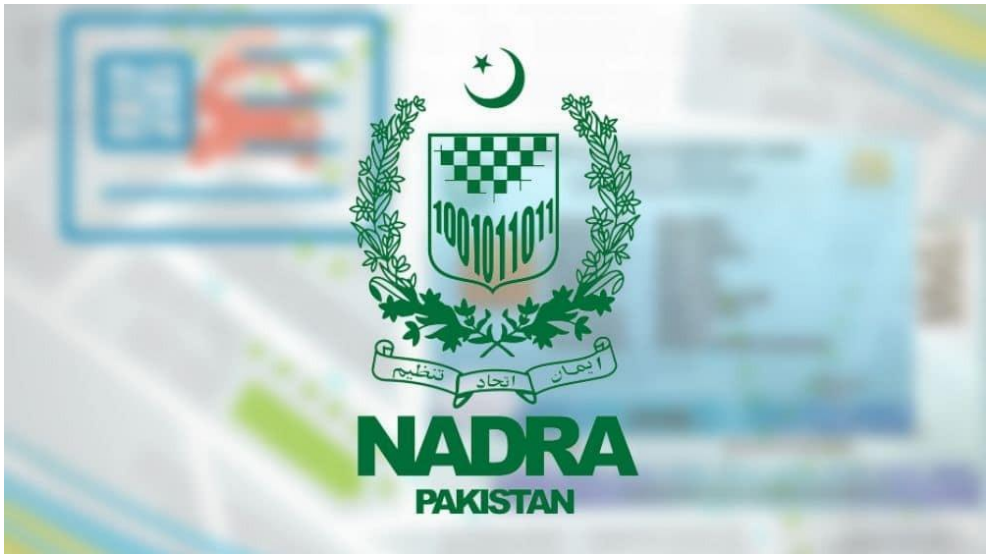


Activity Diagram

Project Title: ***NADRA***

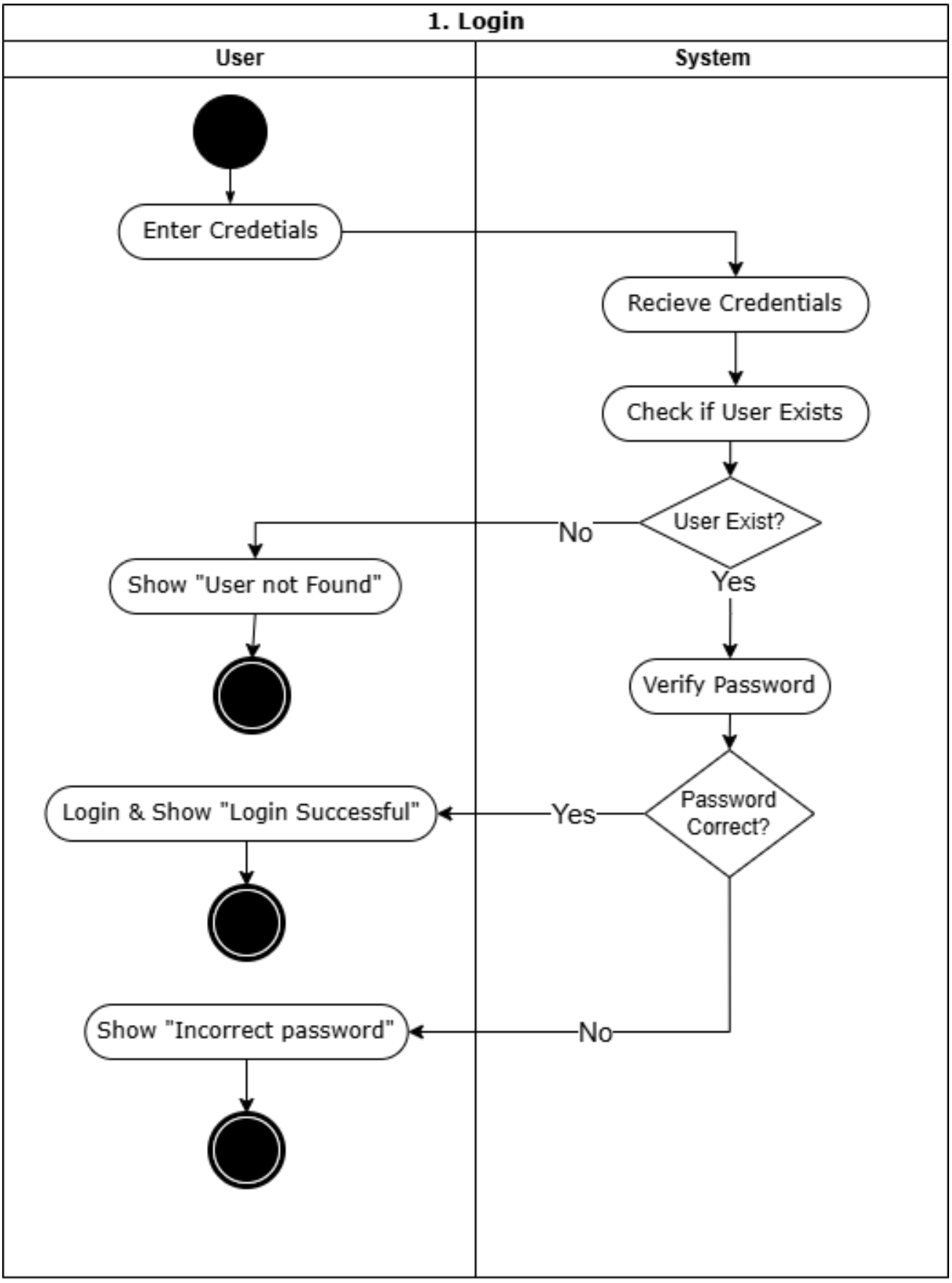
Course Title: Software Construction & Development

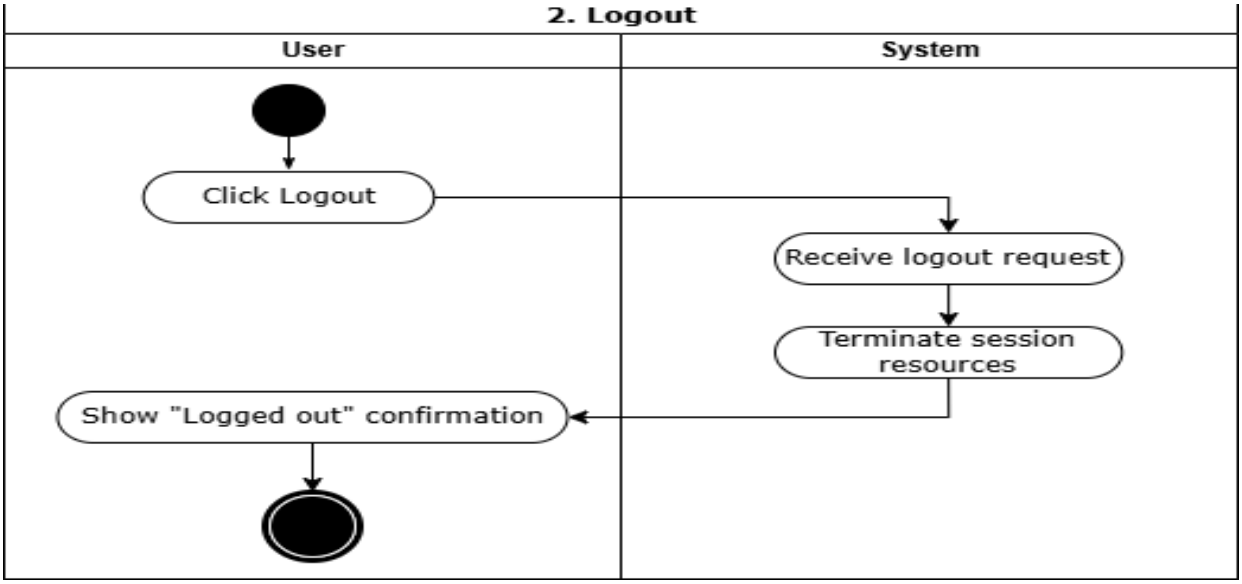
Department: Computing (***Software Engineering***)

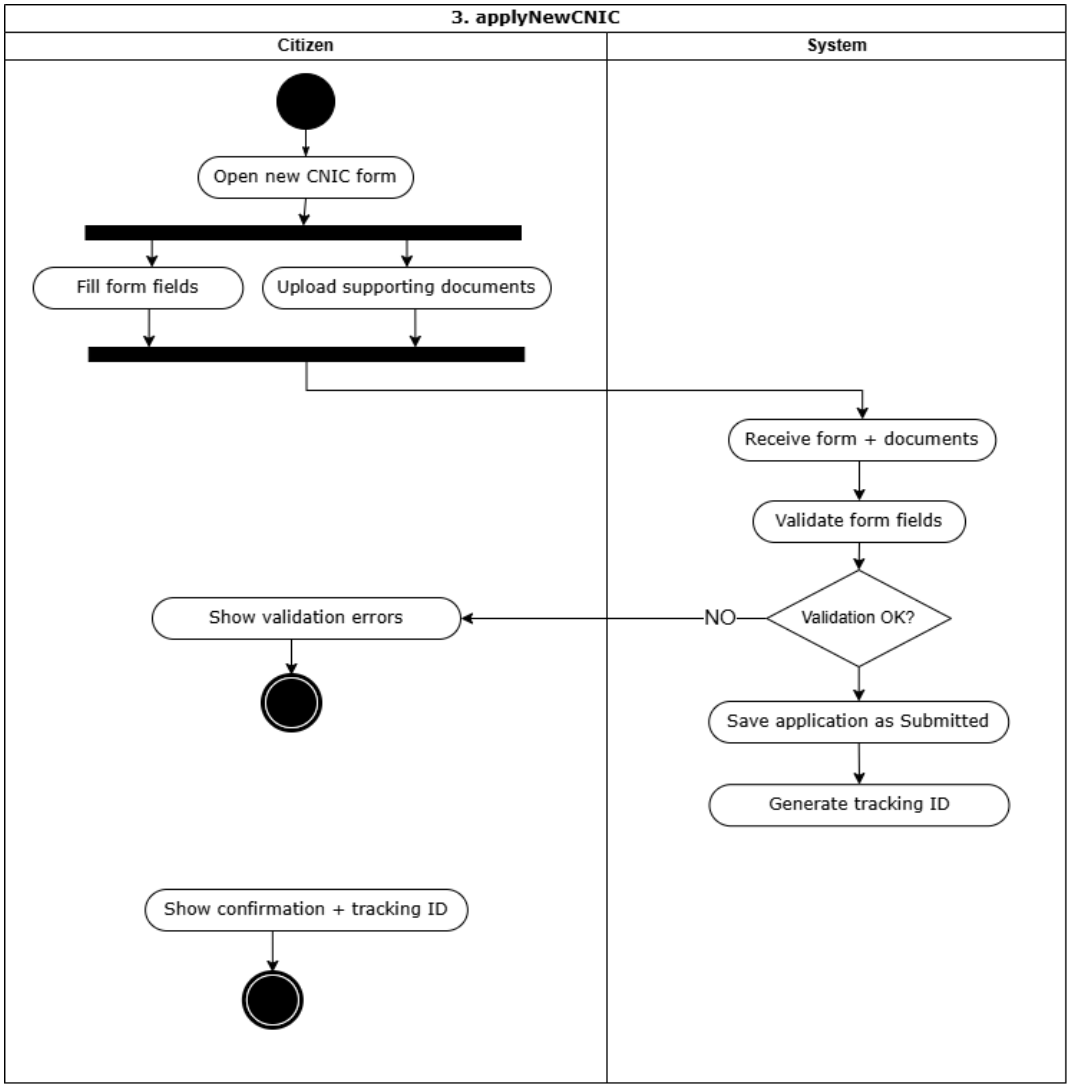
Submitted To: Islam Abbasi

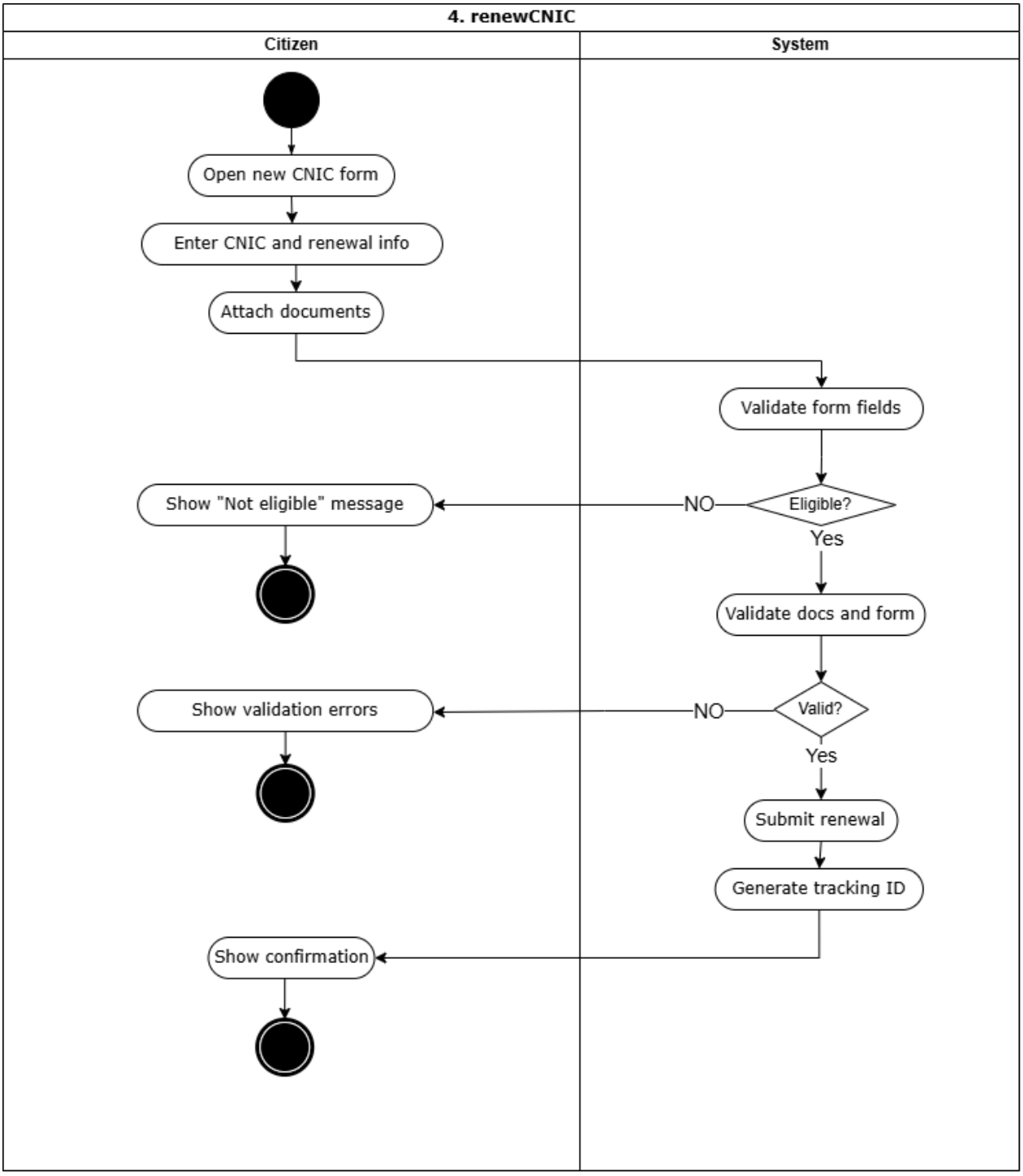
Submitted By:

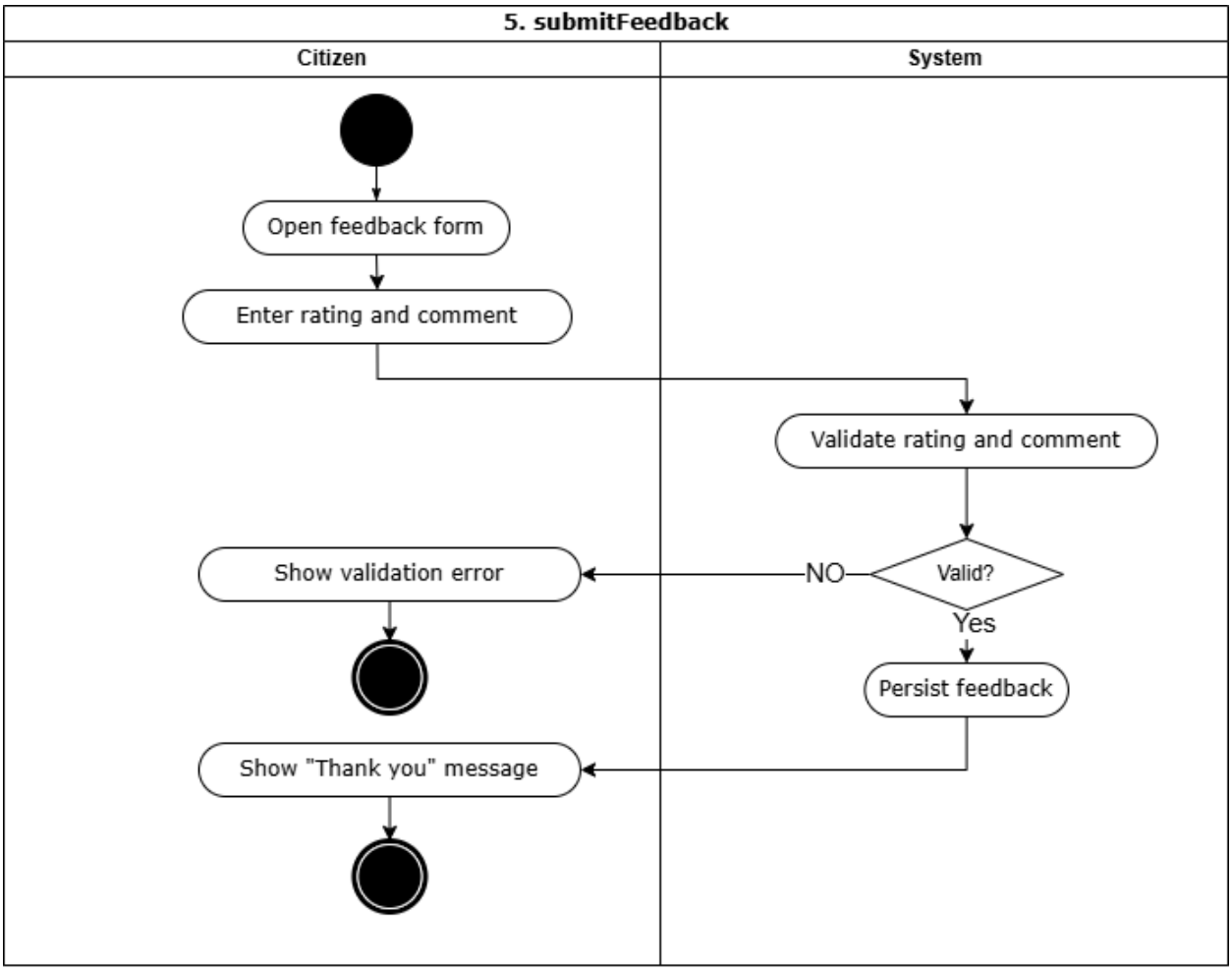
55766	Sufyan Ahmed Mughal
55859	Haseeb Ur Rehman

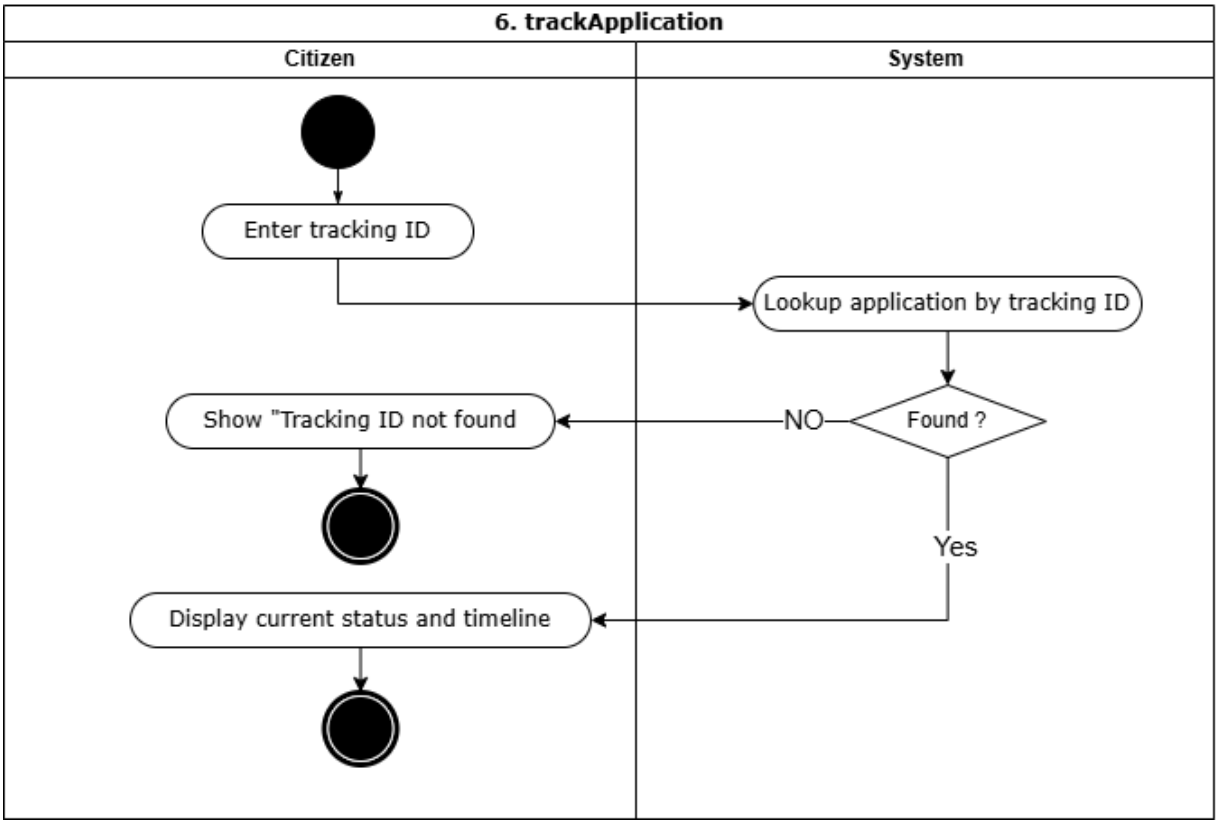

1. Login
User
System
Enter Credetials
Recieve Credentials
Check if User Exists
User Exist?
No
Yes
Show "User not Found"
Verify Password
Password Correct?
Yes
Login & Show "Login Successful"
No
Show "Incorrect password"

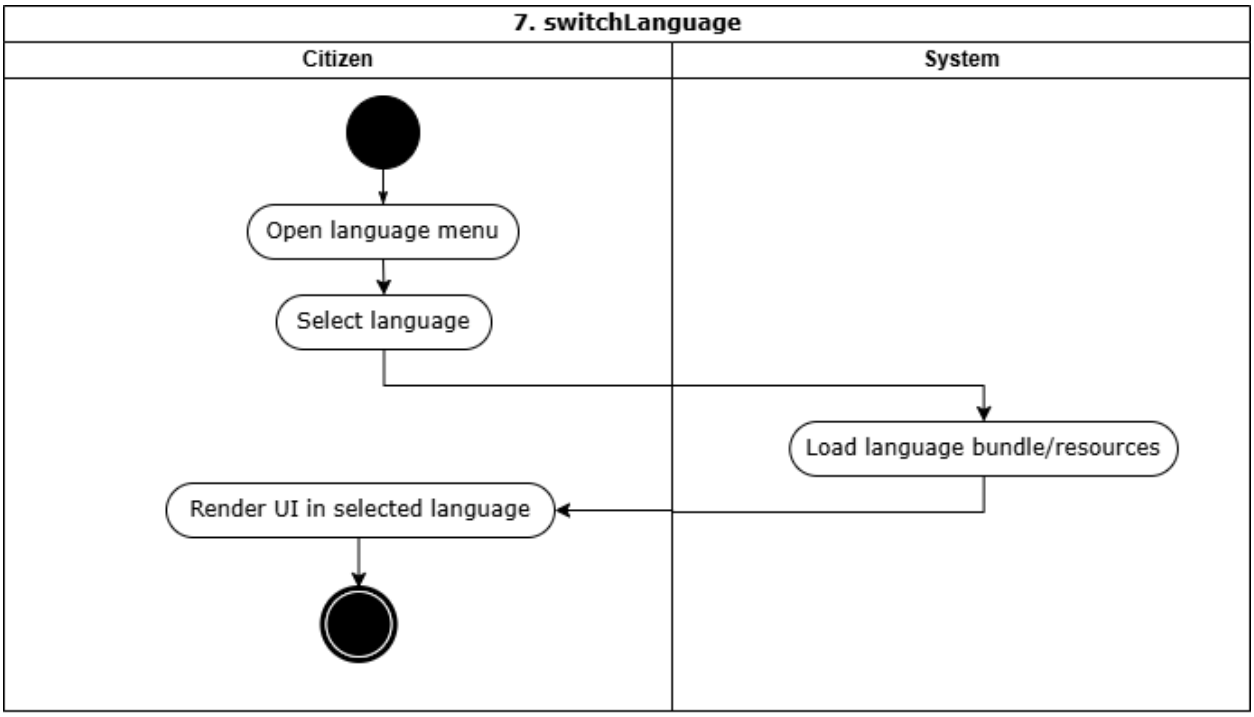

2. Logout
User
System
Click Logout
Receive logout request
Terminate session resources
Show "Logged out" confirmation

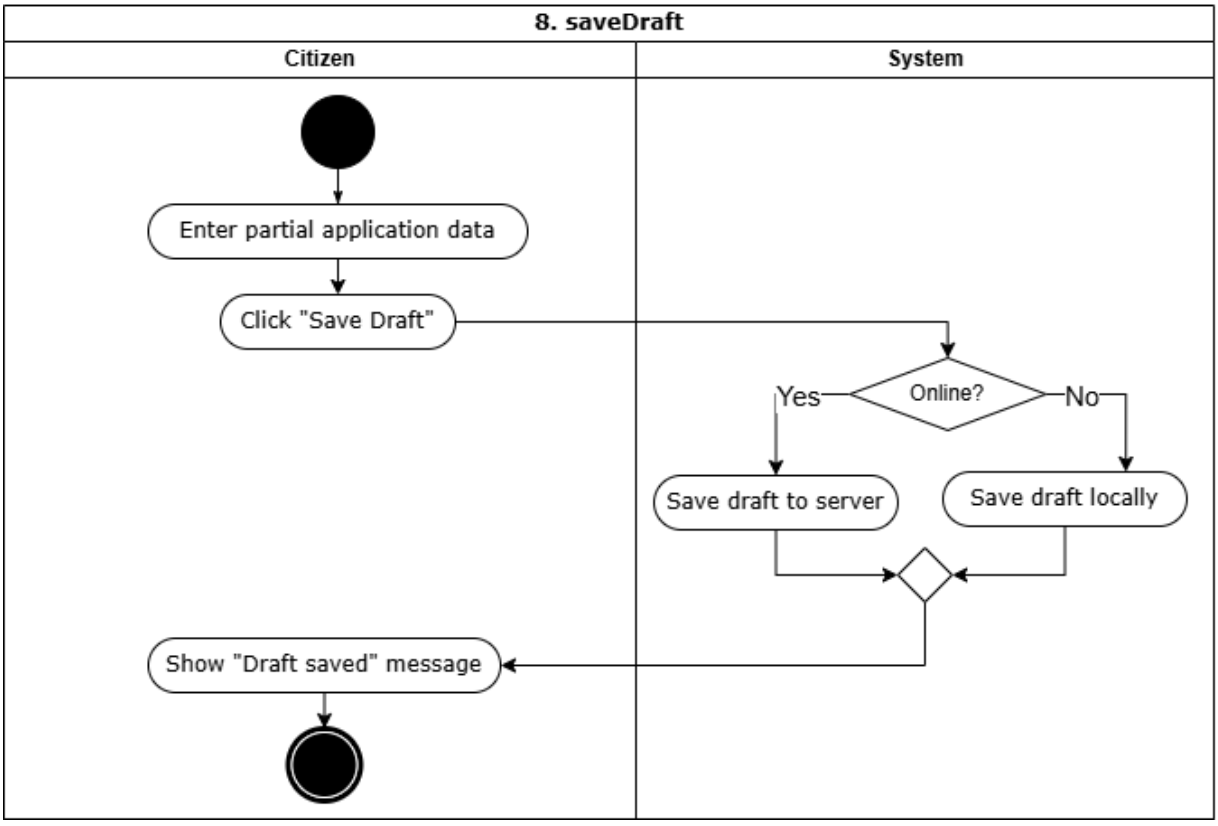

3. applyNewCNIC
Citizen
System
Open new CNIC form
Fill form fields
Upload supporting documents
Receive form + documents
Validate form fields
Validation OK?
NO
Show validation errors
Save application as Submitted
Generate tracking ID
Show confirmation + tracking ID

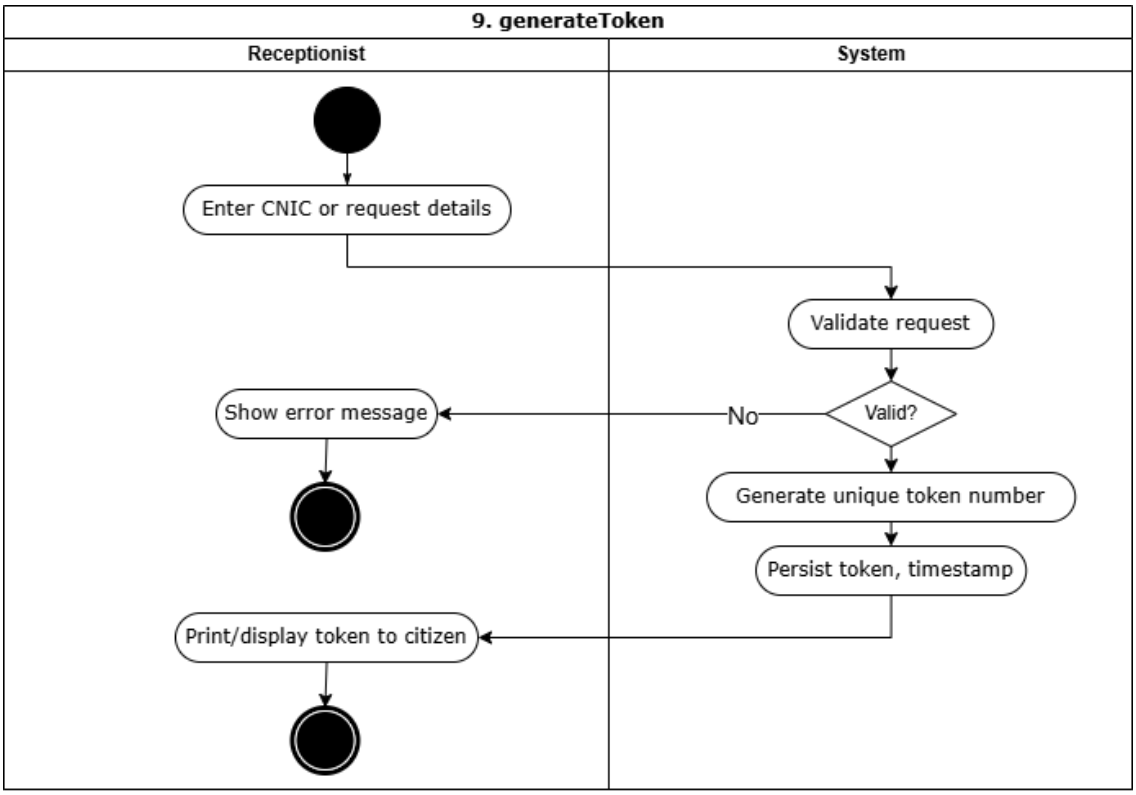

4. renewCNIC
Citizen
System
Open new CNIC form
Enter CNIC and renewal info
Attach documents
Validate form fields
Eligible?
NO
Show "Not eligible" message
Yes
Validate docs and form
Valid?
NO
Show validation errors
Yes
Submit renewal
Generate tracking ID
Show confirmation

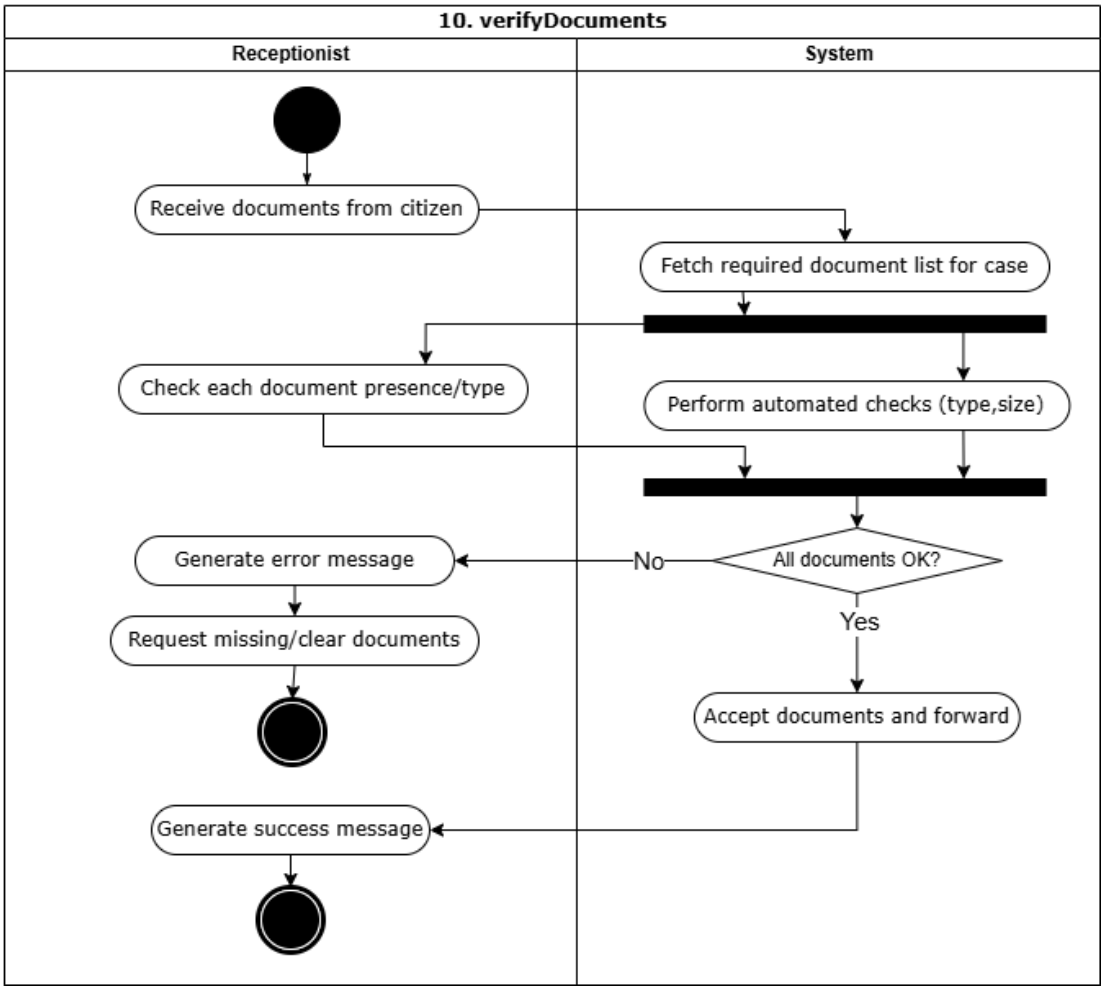

5. submitFeedback
Citizen
System
Open feedback form
Enter rating and comment
Validate rating and comment
Show validation error
NO
Valid?
Yes
Persist feedback
Show "Thank you" message

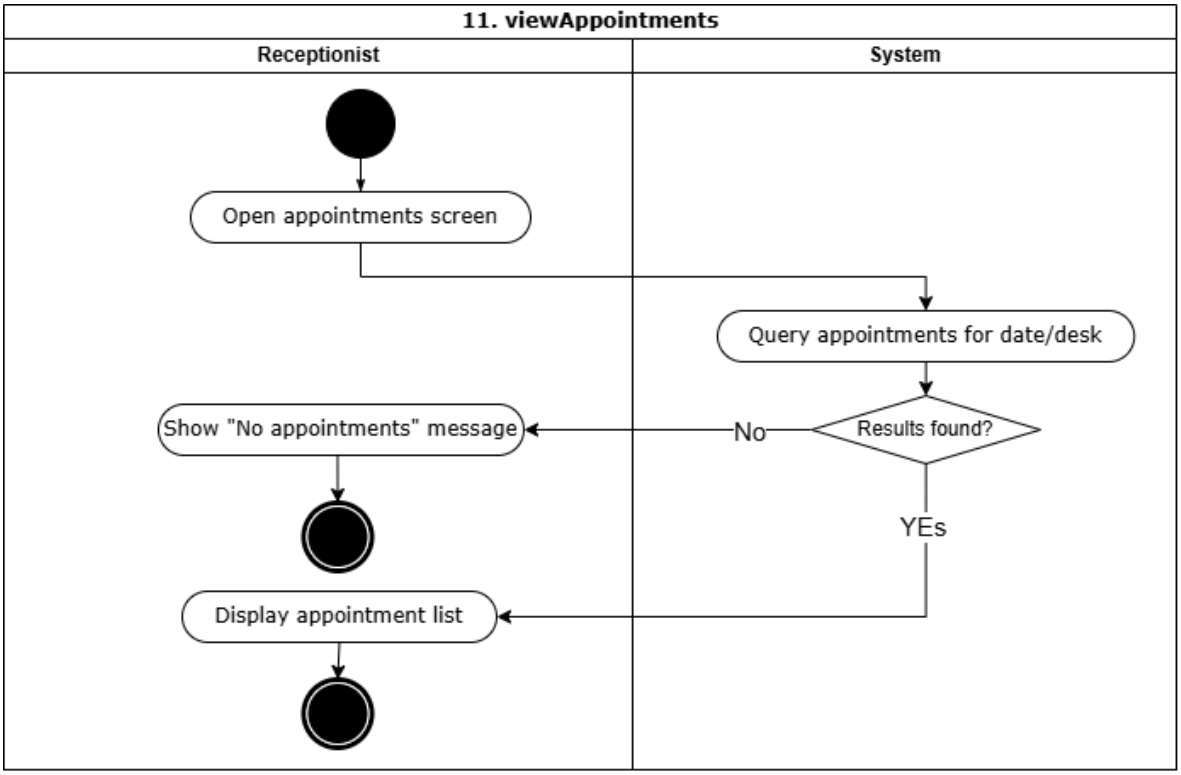

6. trackApplication
Citizen
System
Enter tracking ID
Lookup application by tracking ID
Show "Tracking ID not found
NO
Found ?
Yes
Display current status and timeline

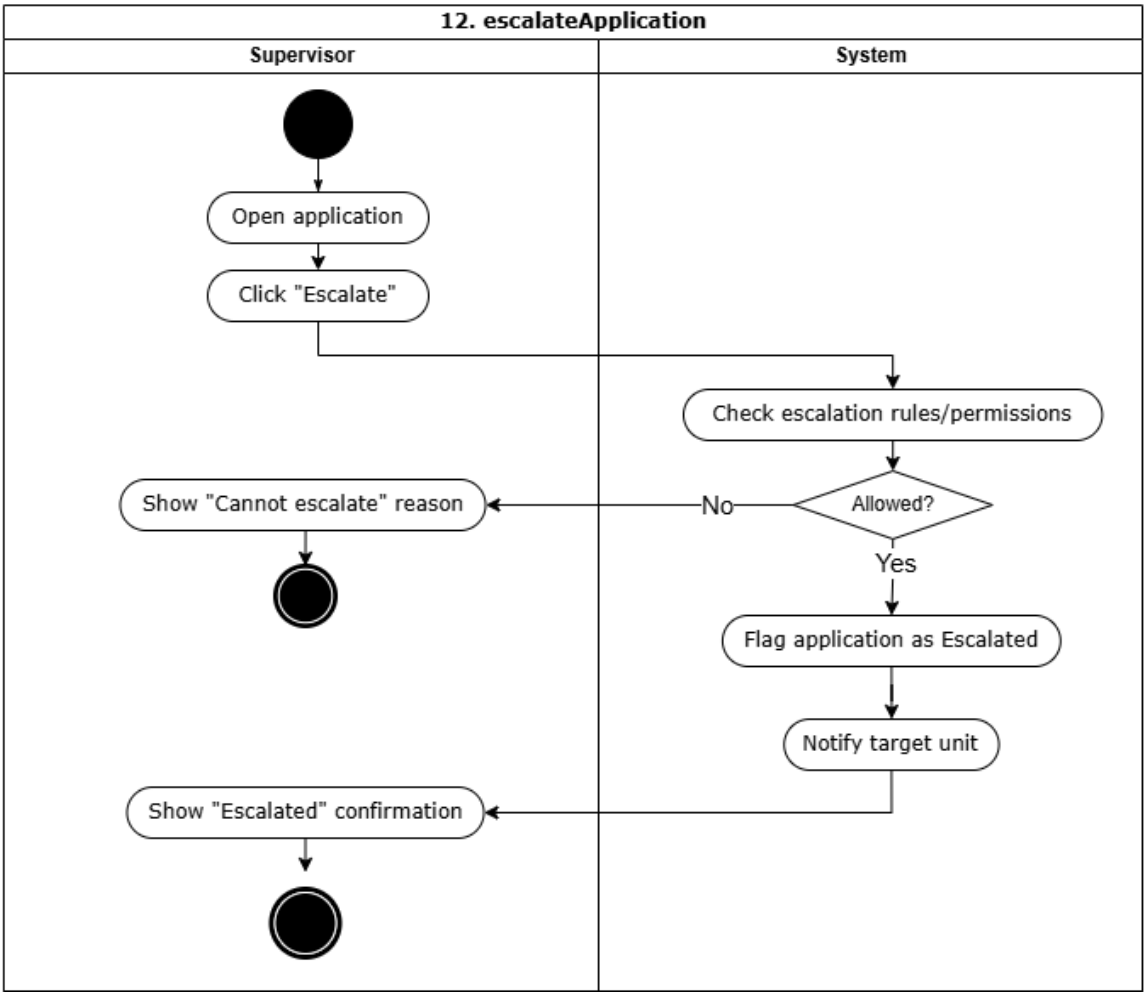

7. switchLanguage
Citizen
System
Open language menu
Select language
Load language bundle/resources
Render UI in selected language

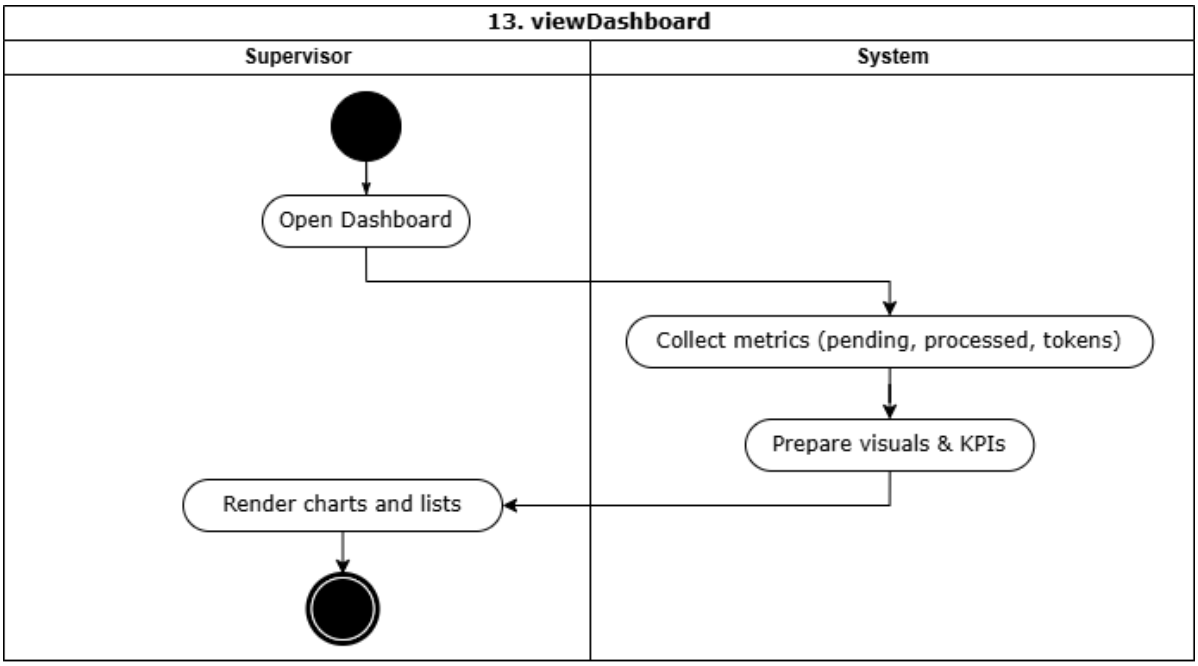

8. saveDraft
Citizen
System
Enter partial application data
Click "Save Draft"
Online?
Yes
No
Save draft to server
Save draft locally
Show "Draft saved" message

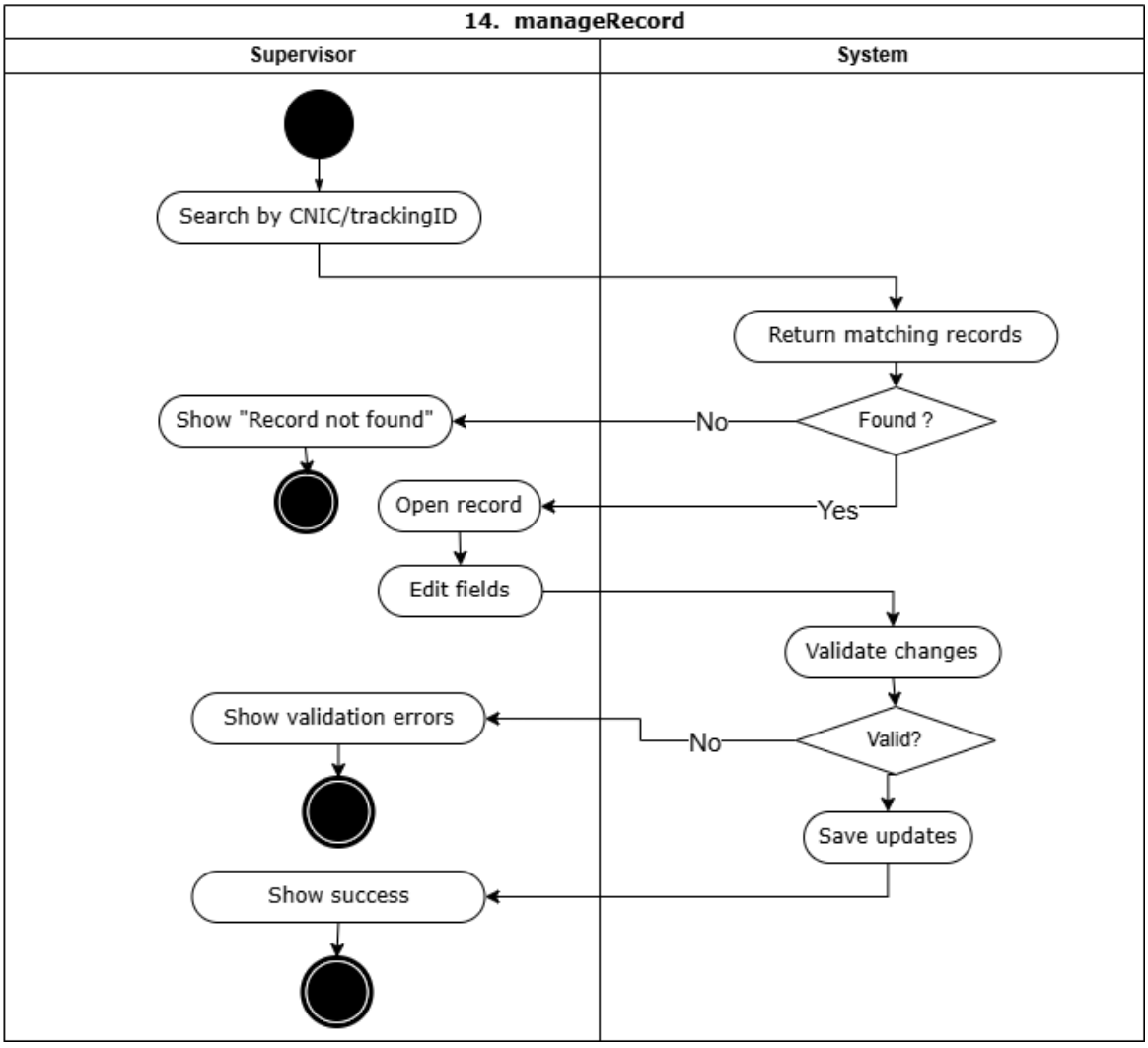

9. generateToken
Receptionist
System
Enter CNIC or request details
Validate request
Show error message
No
Valid?
Generate unique token number
Persist token, timestamp
Print/display token to citizen

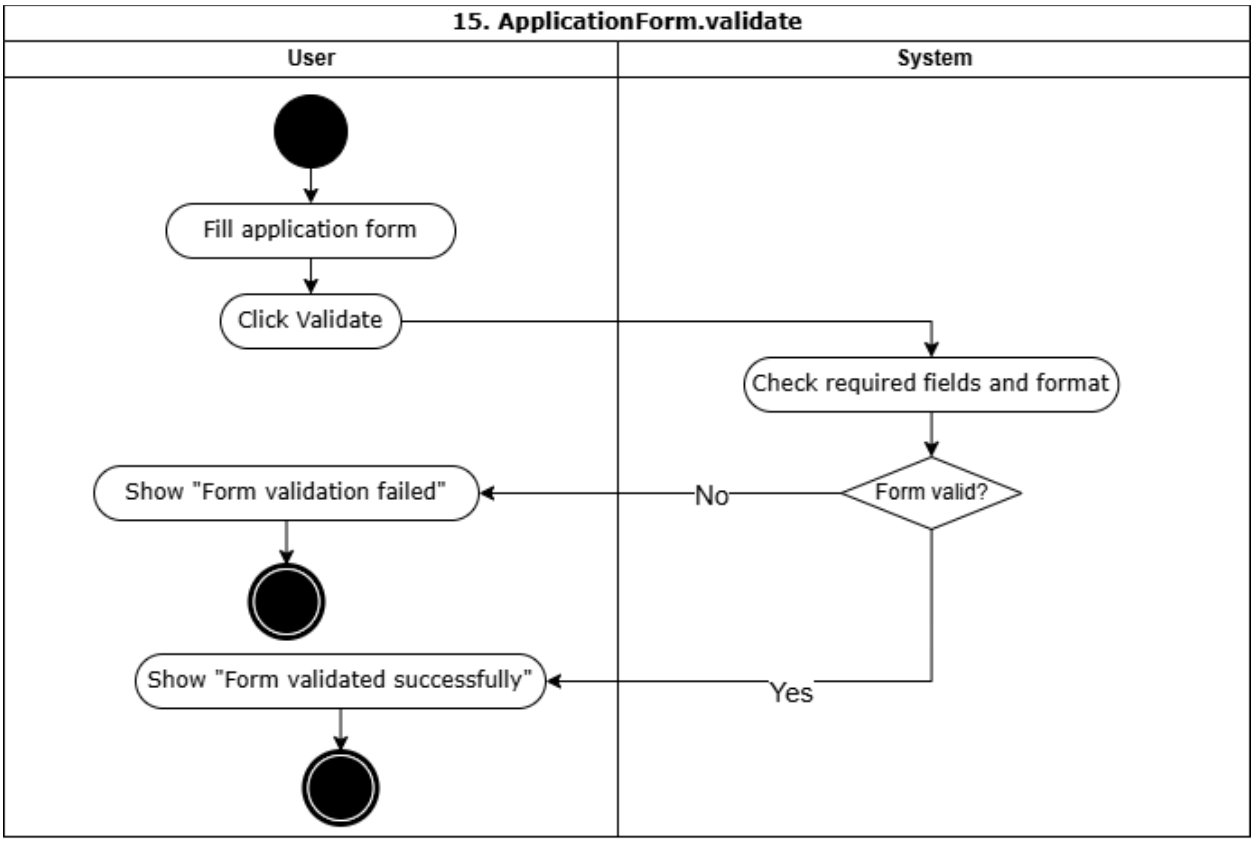

10. verifyDocuments
Receptionist
System
Receive documents from citizen
Fetch required document list for case
Check each document presence/type
Perform automated checks (type,size)
Generate error message
No
All documents OK?
Yes
Request missing/clear documents
Accept documents and forward
Generate success message

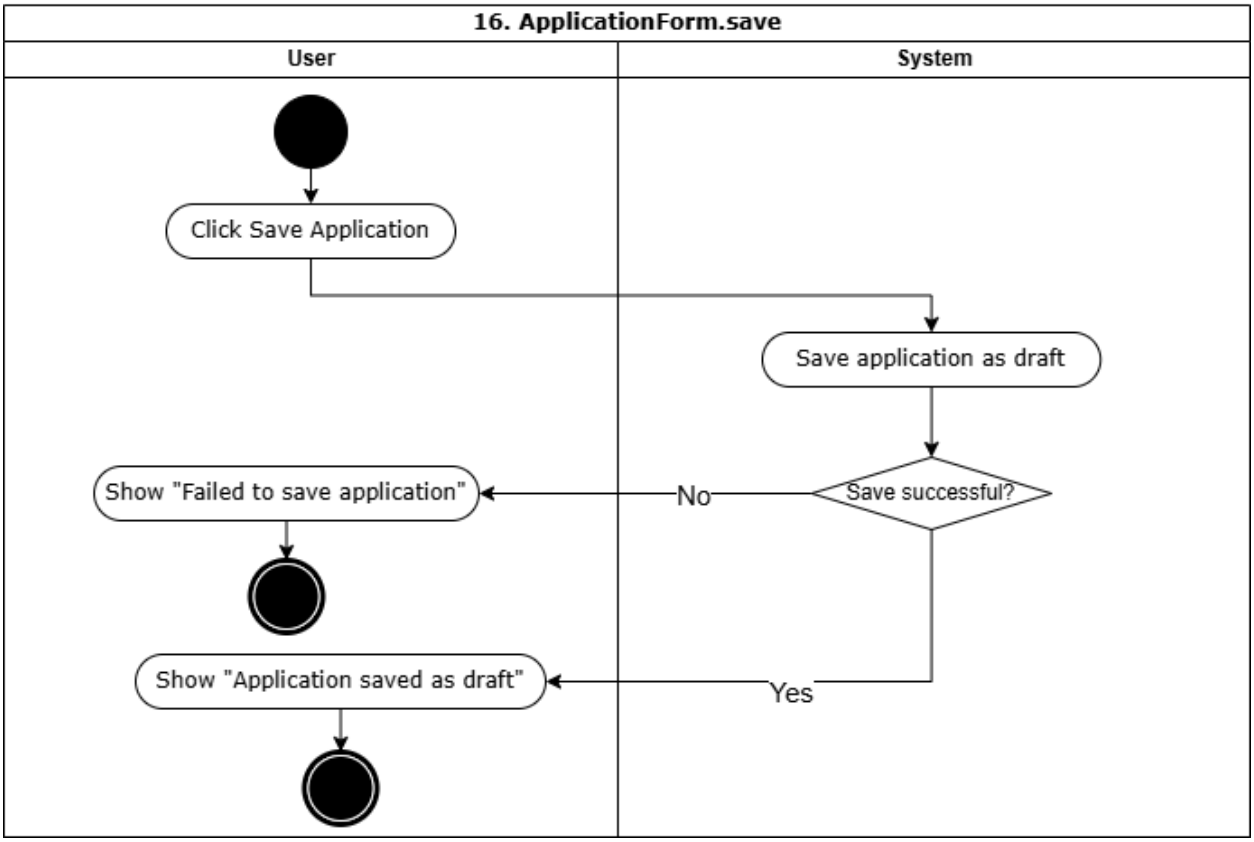

11. viewAppointments
Receptionist
System
Open appointments screen
Query appointments for date/desk
Results found?
No
Show "No appointments" message
YEs
Display appointment list

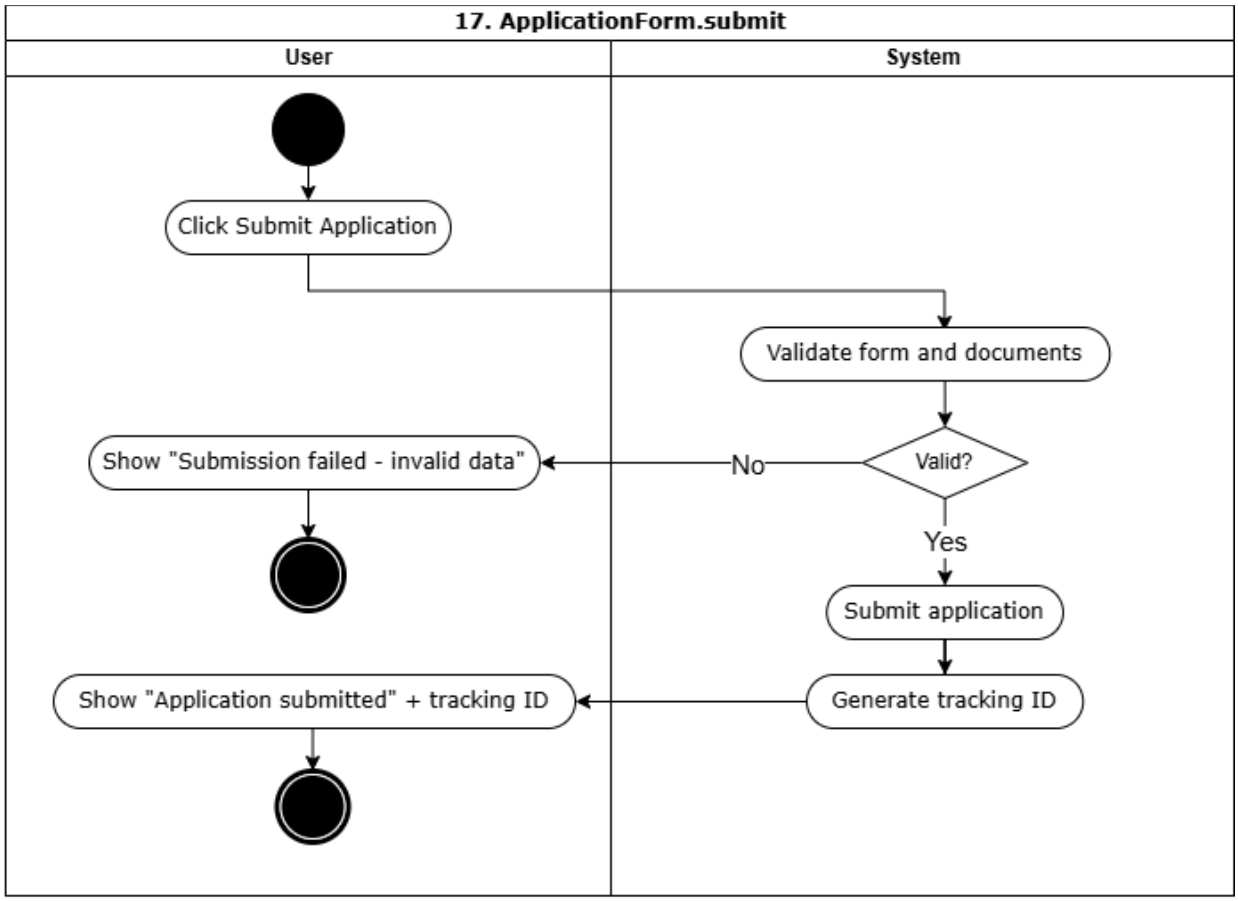

12. escalateApplication
Supervisor
System
Open application
Click "Escalate"
Check escalation rules/permissions
Allowed?
No
Show "Cannot escalate" reason
Yes
Flag application as Escalated
Notify target unit
Show "Escalated" confirmation

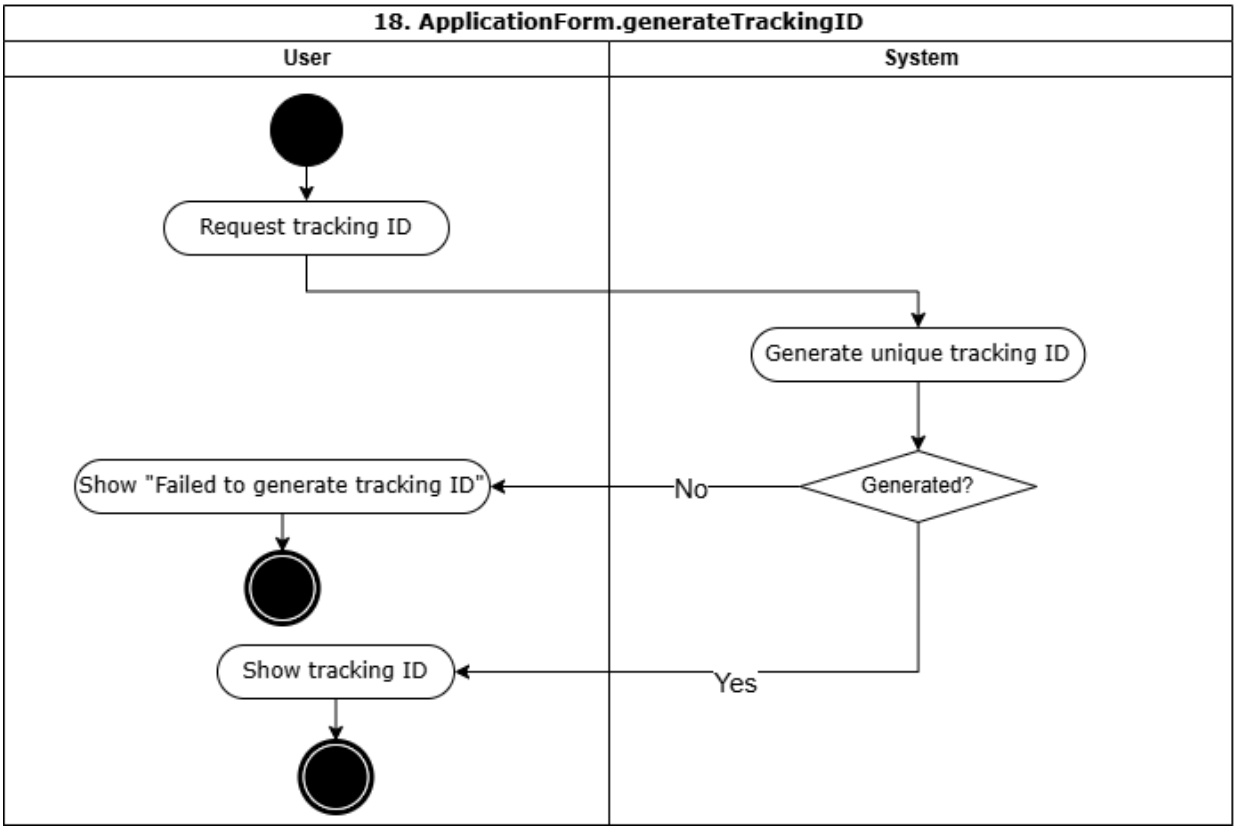

13. viewDashboard
Supervisor
System
Open Dashboard
Collect metrics (pending, processed, tokens)
Prepare visuals & KPIs
Render charts and lists

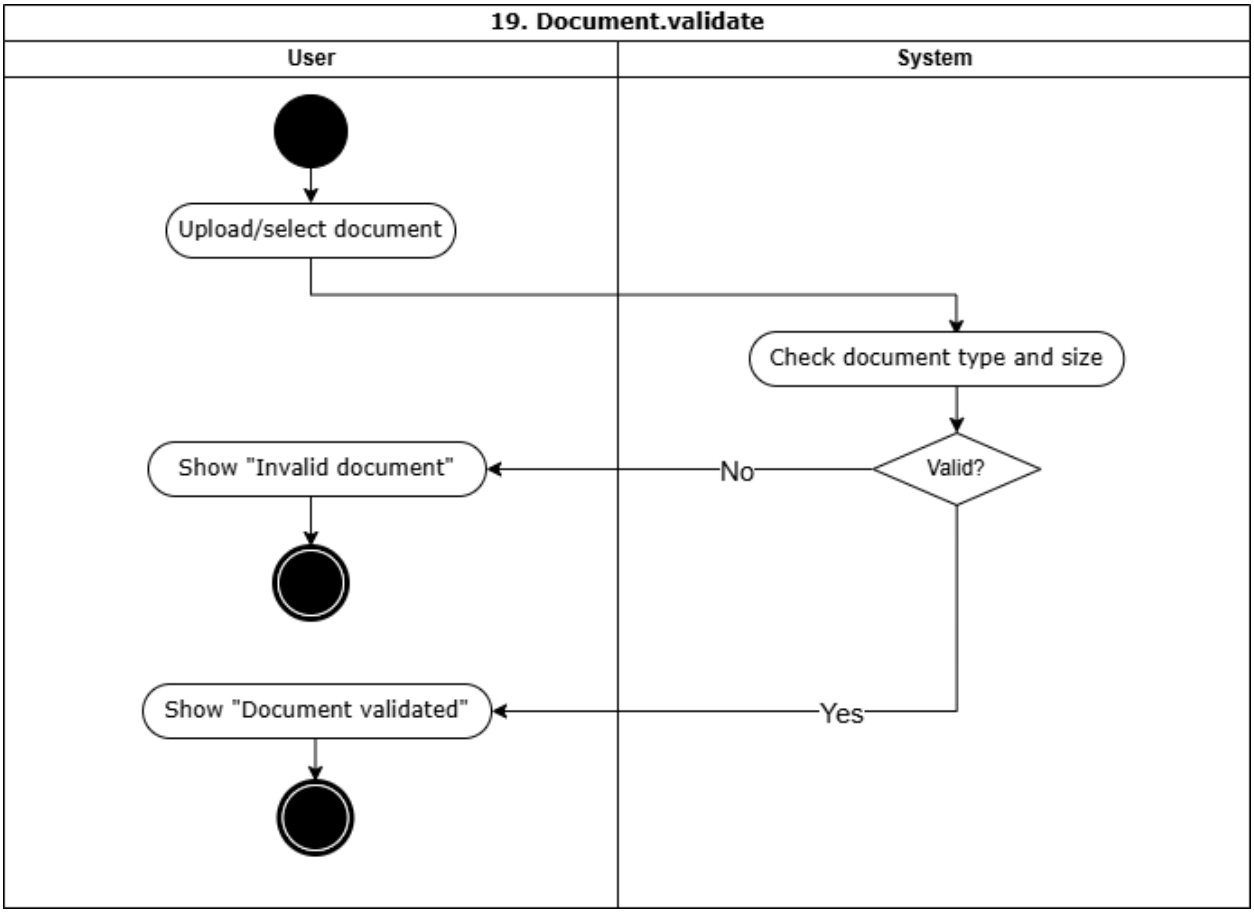

14. manageRecord
Supervisor
System
Search by CNIC/trackingID
Return matching records
Found ?
No
Show "Record not found"
Yes
Open record
Edit fields
Validate changes
Valid?
No
Show validation errors
Save updates
Show success

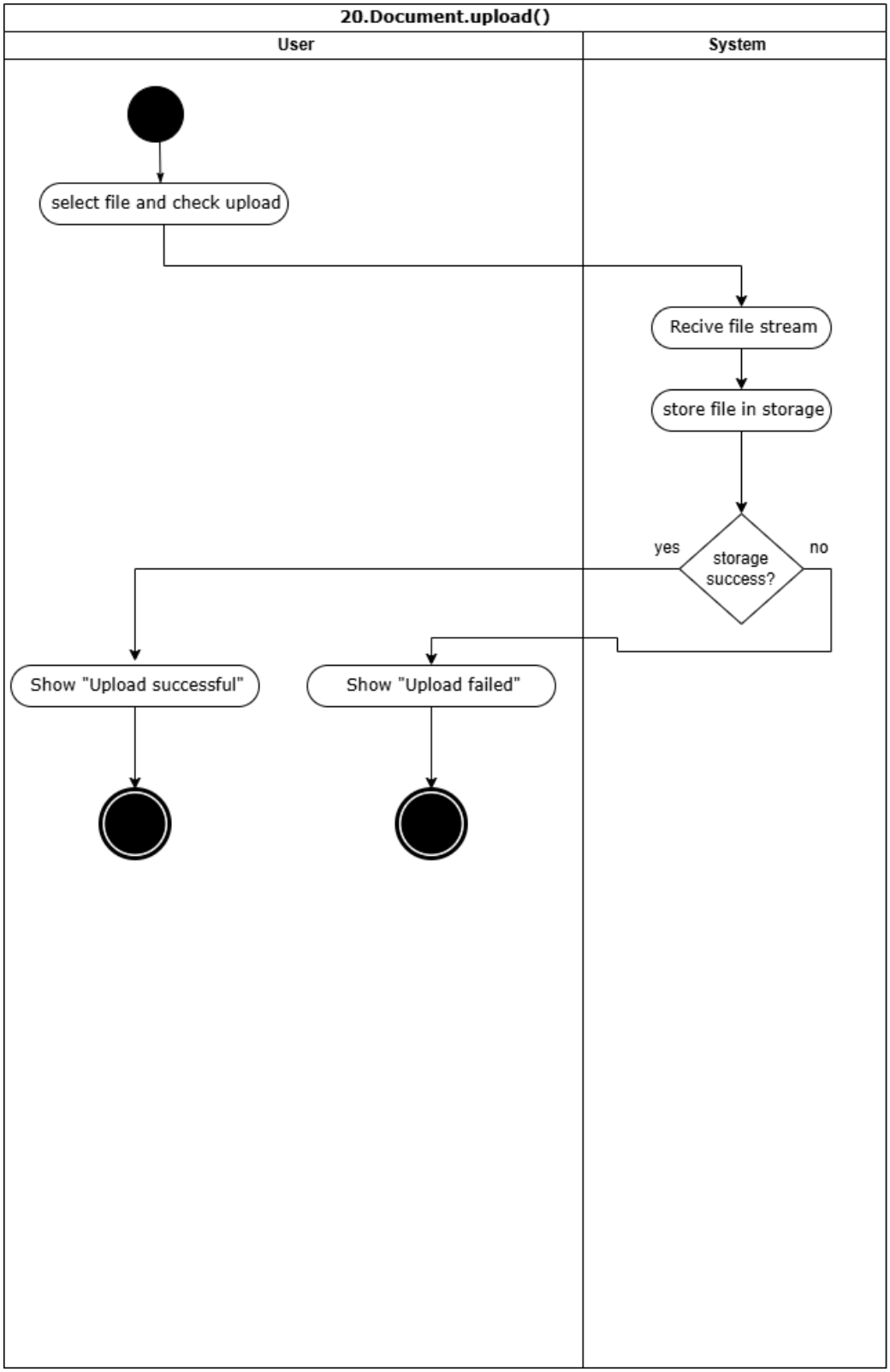

15. ApplicationForm.validate
User
System
Fill application form
Click Validate
Check required fields and format
Form valid?
No
Show "Form validation failed"
Yes
Show "Form validated successfully"

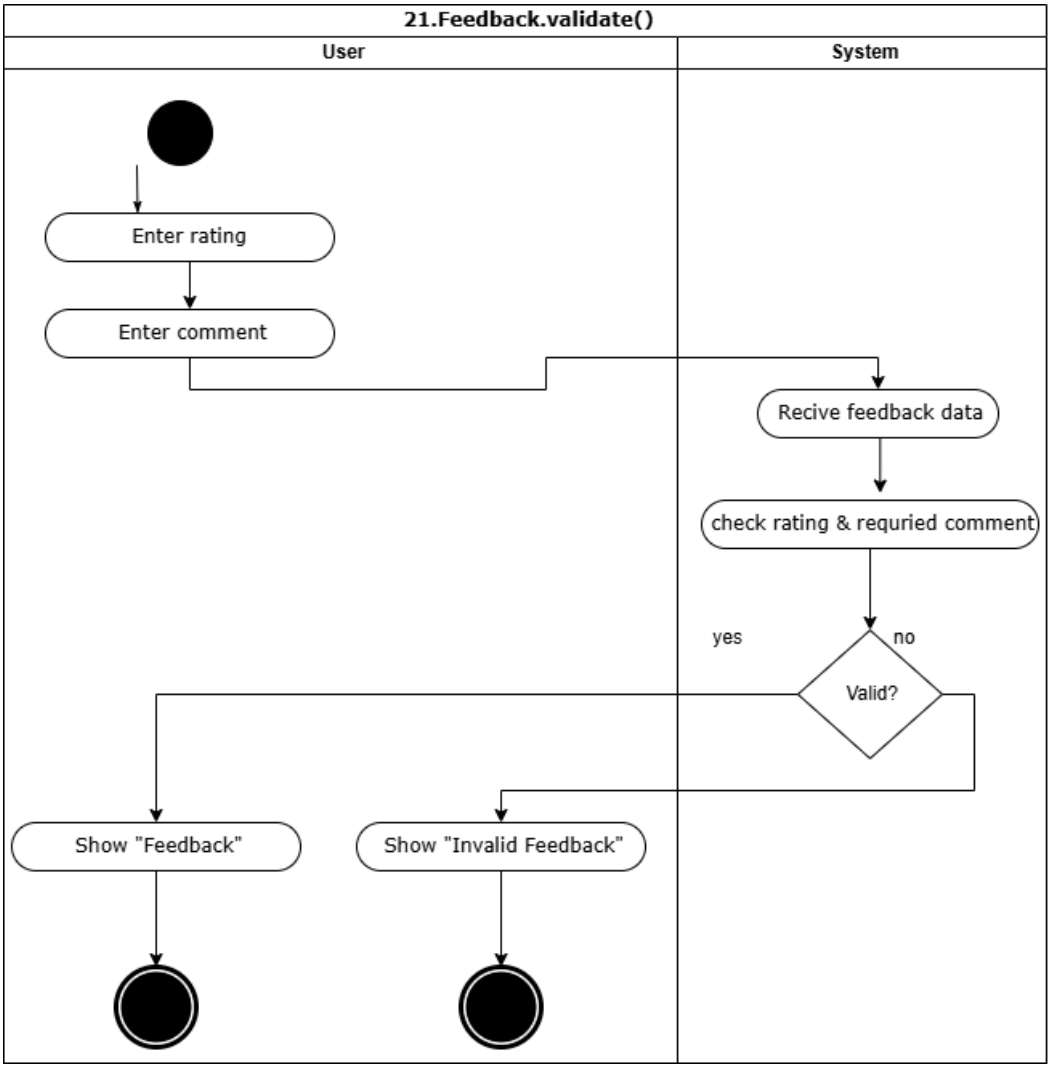

16. ApplicationForm.save
User
System
Click Save Application
Save application as draft
Save successful?
No
Show "Failed to save application"
Yes
Show "Application saved as draft"

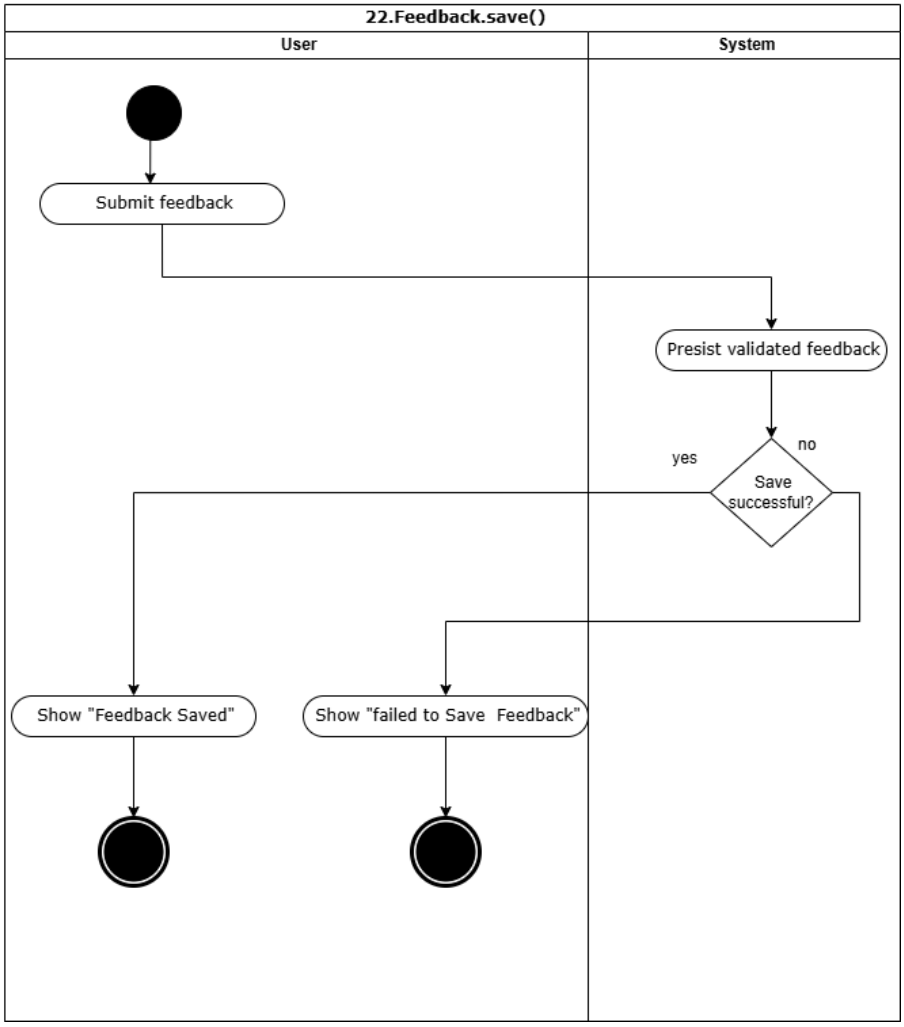

17. ApplicationForm.submit
User
System
Click Submit Application
Validate form and documents
Valid?
No
Show "Submission failed - invalid data"
Yes
Submit application
Generate tracking ID
Show "Application submitted" + tracking ID

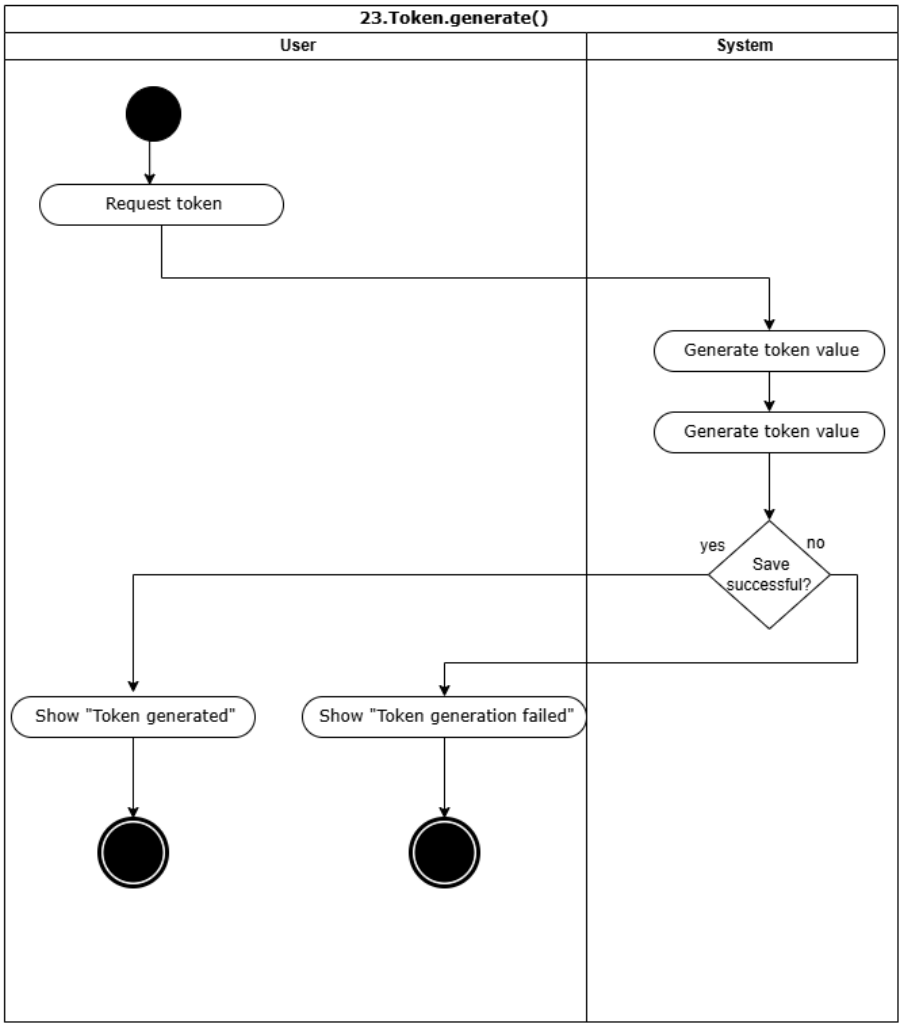

18. ApplicationForm.generateTrackingID
User
System
Request tracking ID
Generate unique tracking ID
Generated?
No
Show "Failed to generate tracking ID"
Yes
Show tracking ID

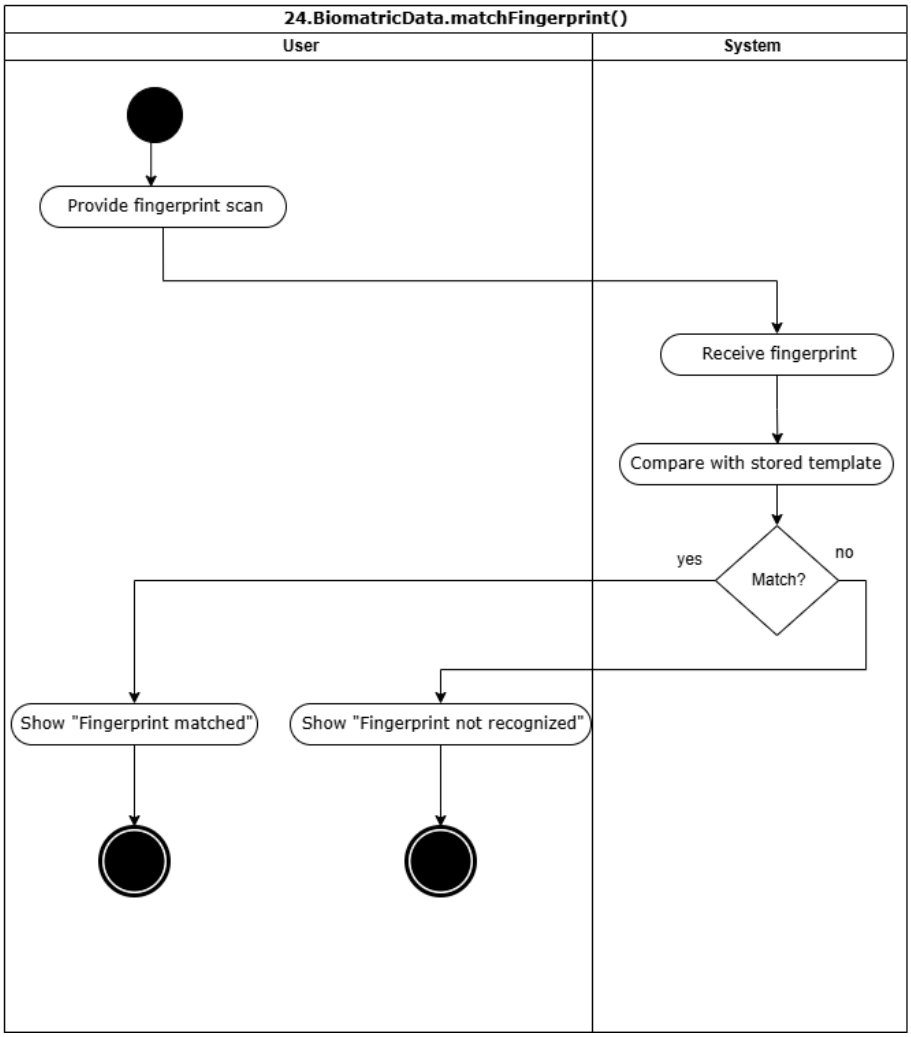

19. Document.validate
User
System
Upload/select document
Check document type and size
Valid?
No
Show "Invalid document"
Yes
Show "Document validated"

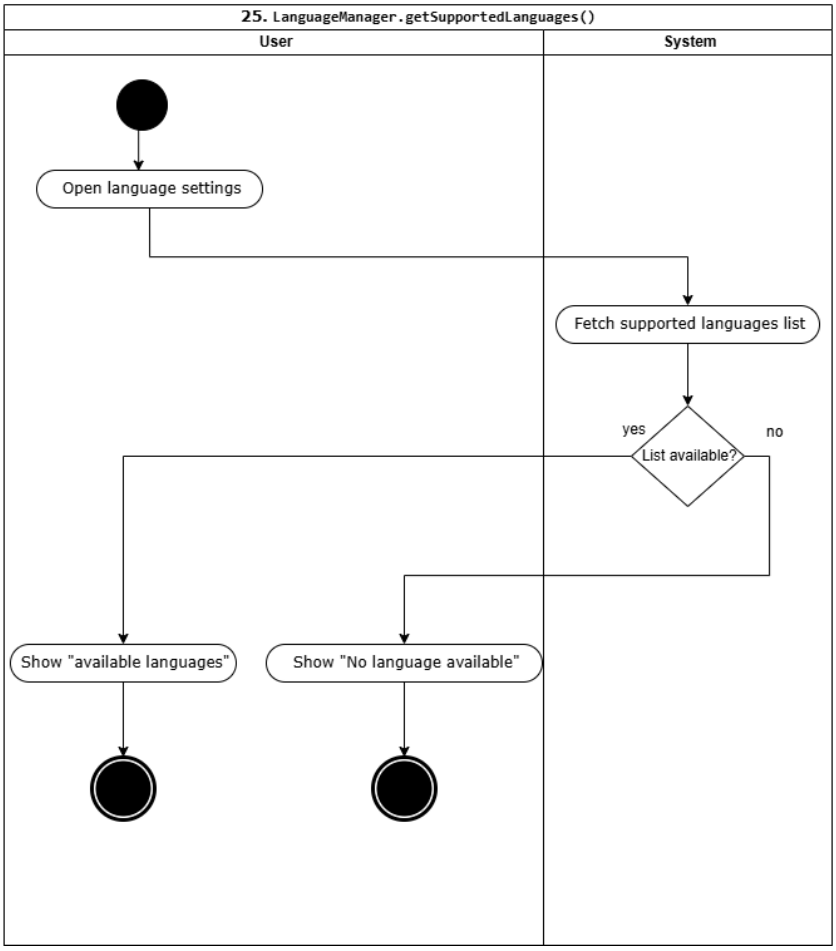

20.Document.upload()
User
System
select file and check upload
Recive file stream
store file in storage
yes
storage success?
no
Show "Upload successful"
Show "Upload failed"

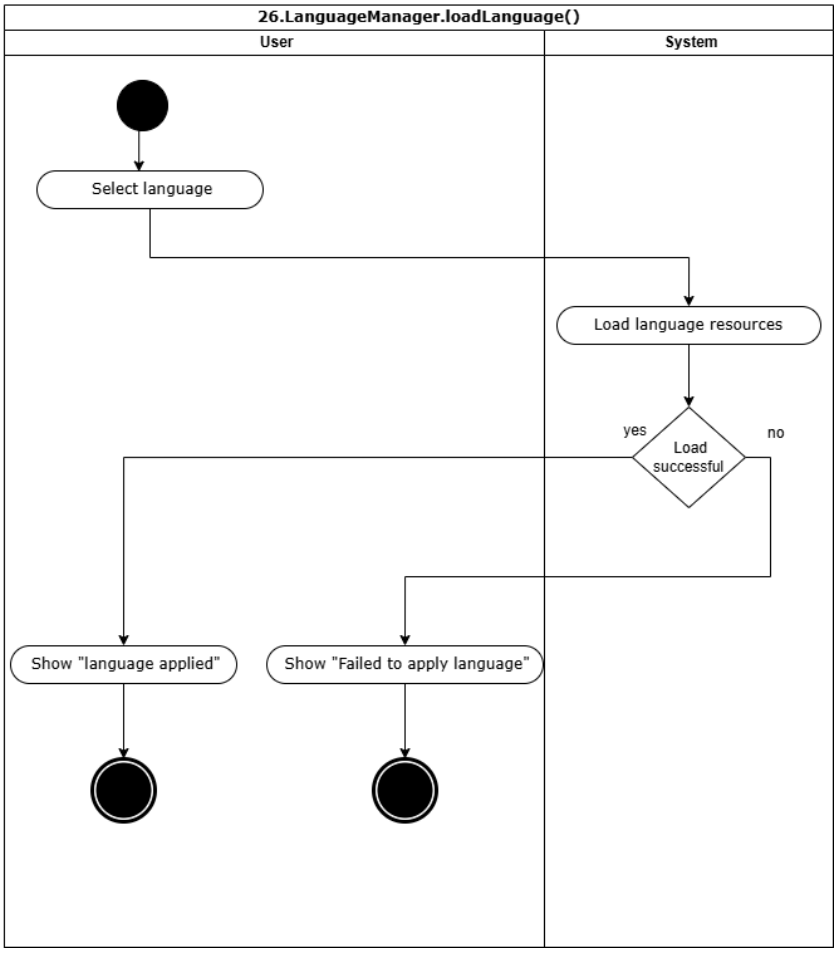

21.Feedback.validate()
User
System
Enter rating
Enter comment
Recive feedback data
check rating & requried comment
yes
no
Valid?
Show "Feedback"
Show "Invalid Feedback"

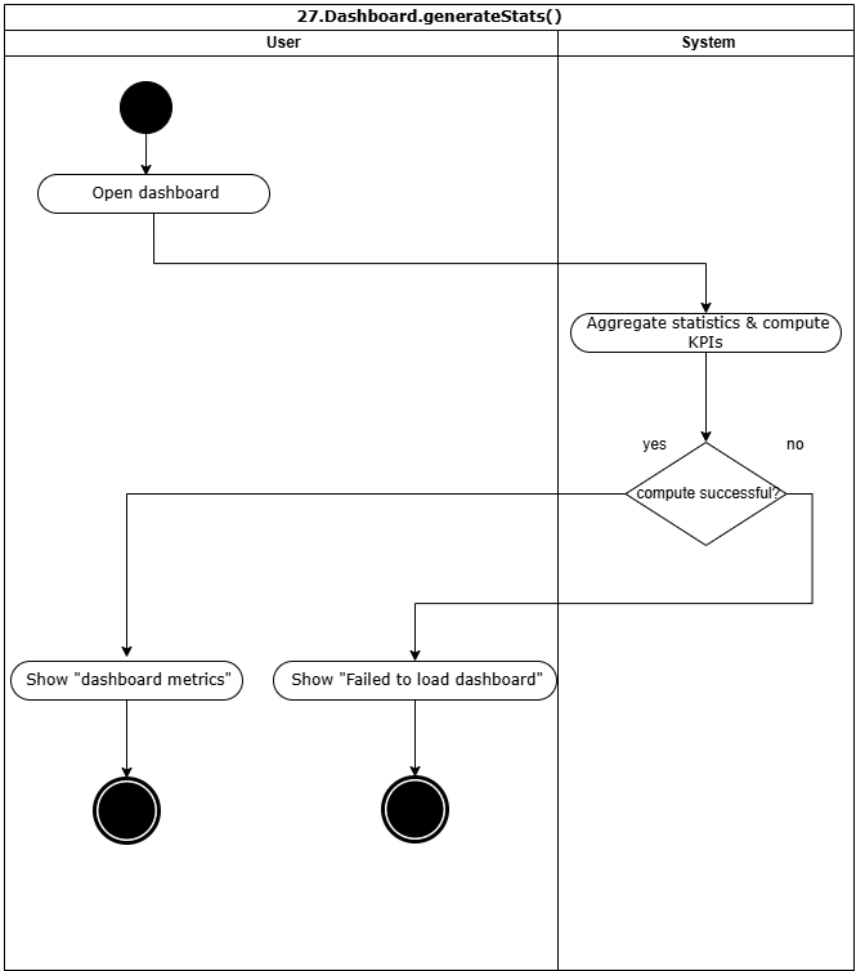

22.Feedback.save()
User
System
Submit feedback
Presist validated feedback
yes
no
Save successful?
Show "Feedback Saved"
Show "failed to Save Feedback"

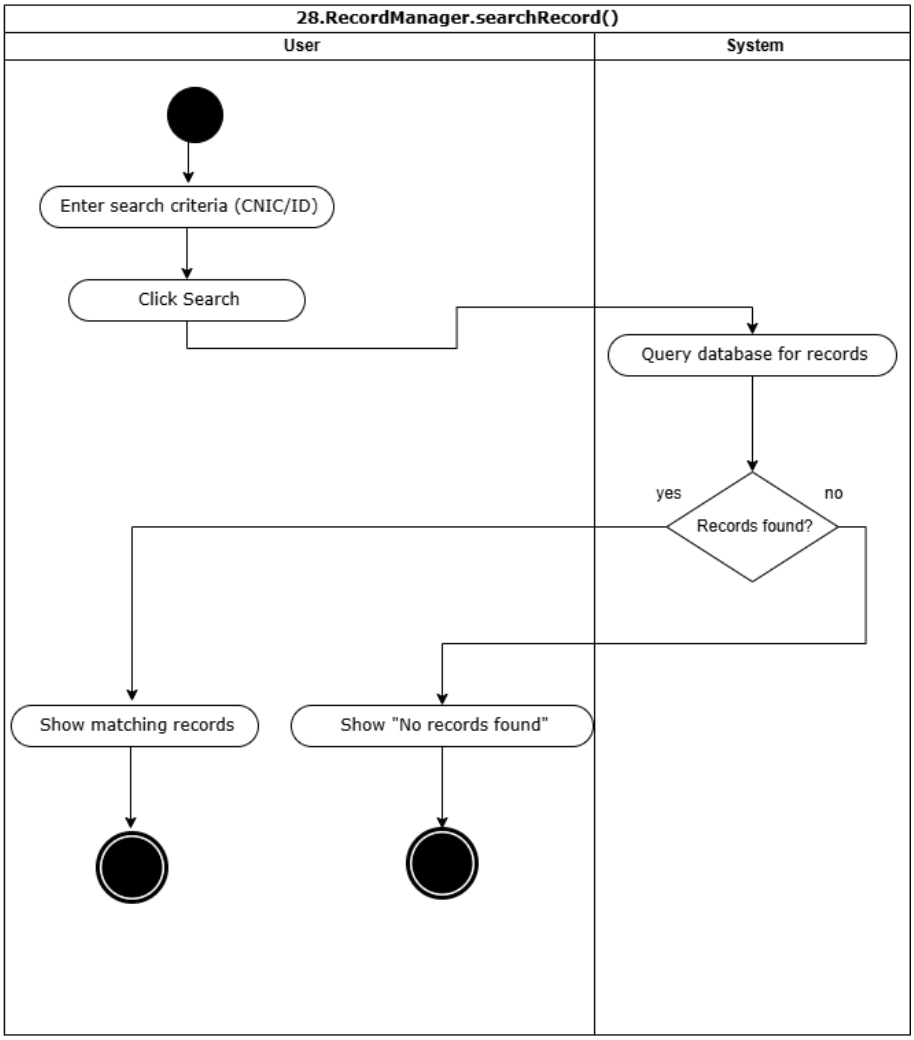

23.Token.generate()
User
System
Request token
Generate token value
Generate token value
yes
no
Save successful?
Show "Token generated"
Show "Token generation failed"

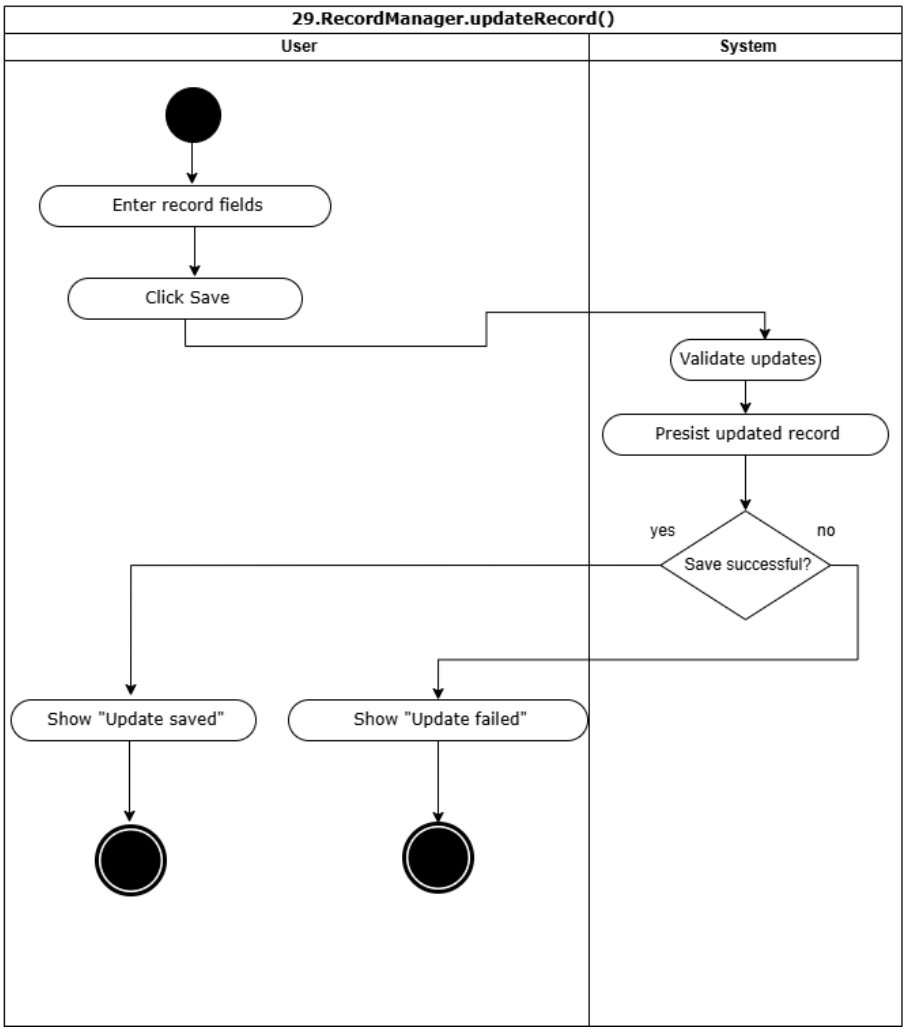

24.BiomatricData.matchFingerprint()
User
System
Provide fingerprint scan
Receive fingerprint
Compare with stored template
Match?
yes
no
Show "Fingerprint matched"
Show "Fingerprint not recognized"

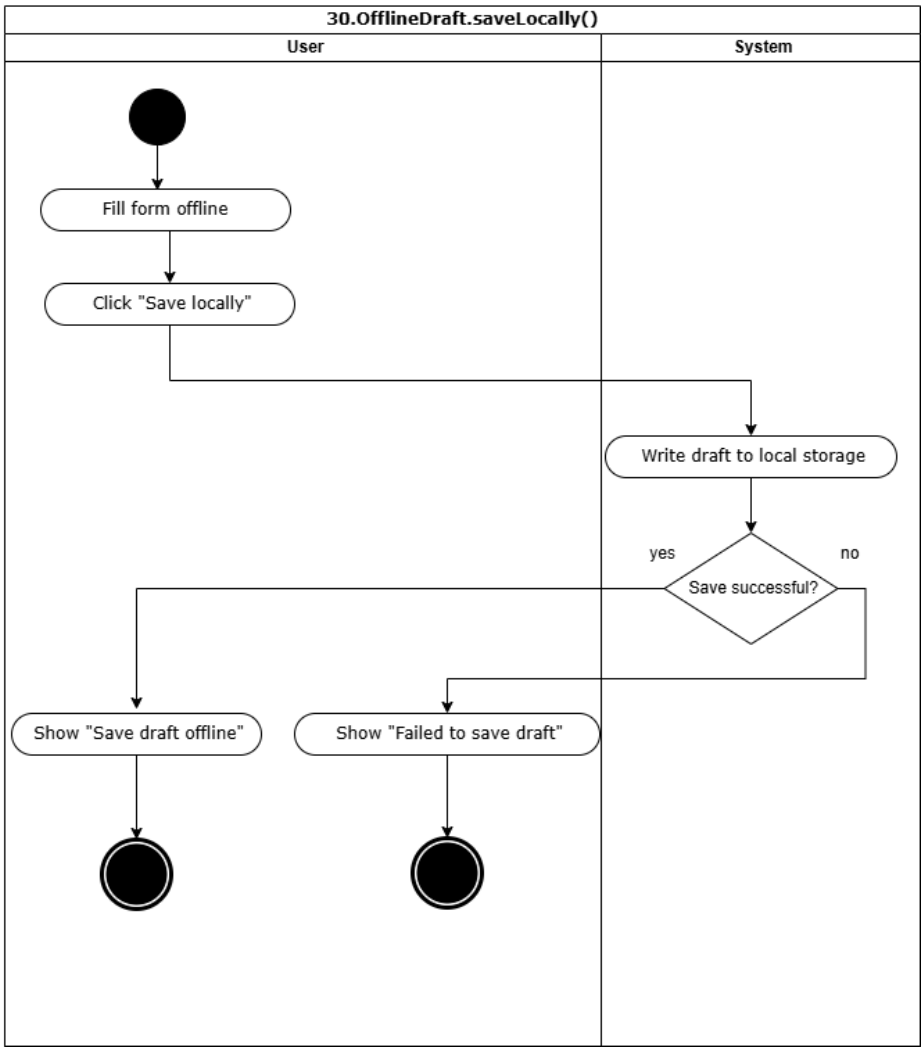

25. LanguageManager.getSupportedLanguages()
User
System
Open language settings
Fetch supported languages list
yes
List available?
no
Show "available languages"
Show "No language available"

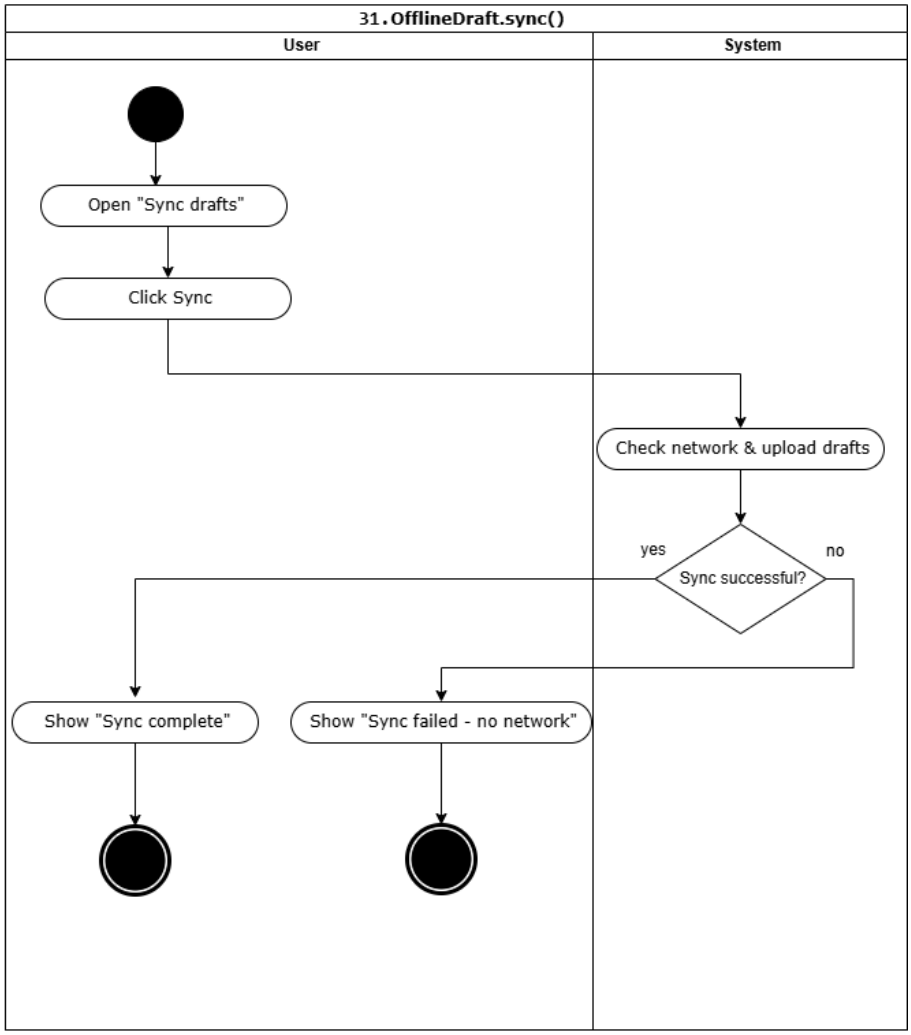

26.LanguageManager.loadLanguage()
User
System
Select language
Load language resources
yes
Load successful
no
Show "language applied"
Show "Failed to apply language"

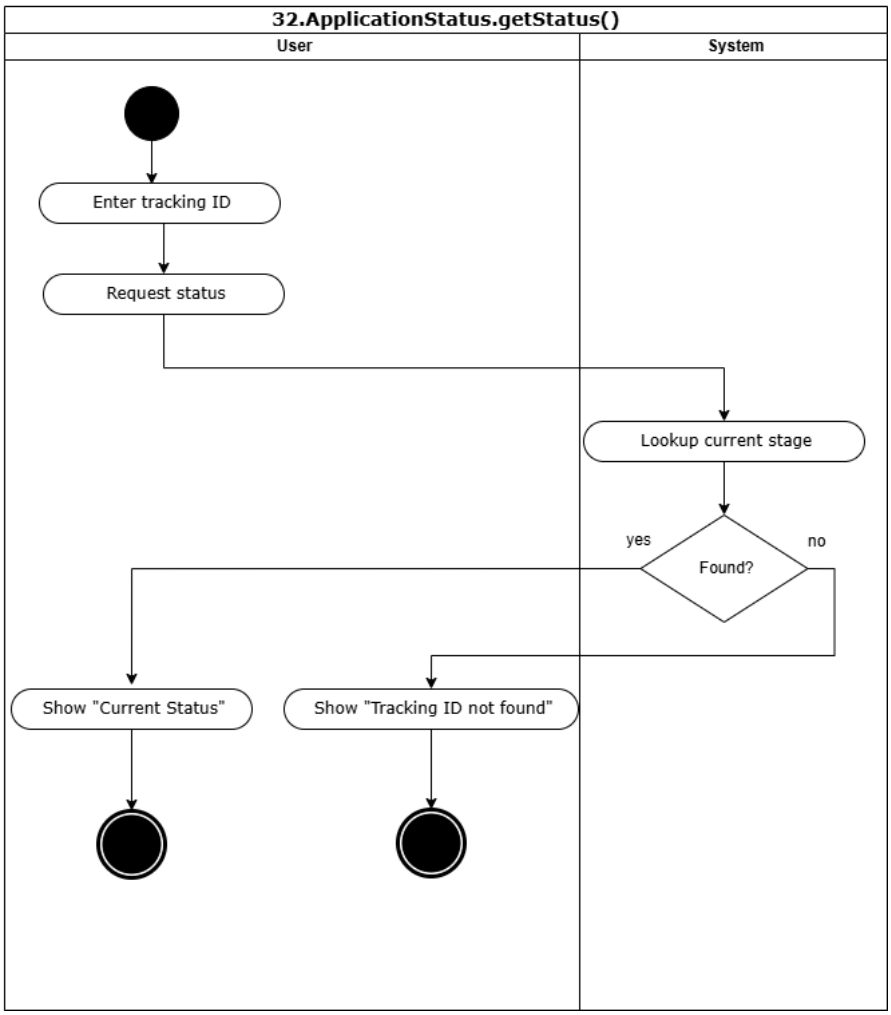

27.Dashboard.generateStats()
User
System
Open dashboard
Aggregate statistics & compute KPIs
yes
no
compute successful?
Show "dashboard metrics"
Show "Failed to load dashboard"

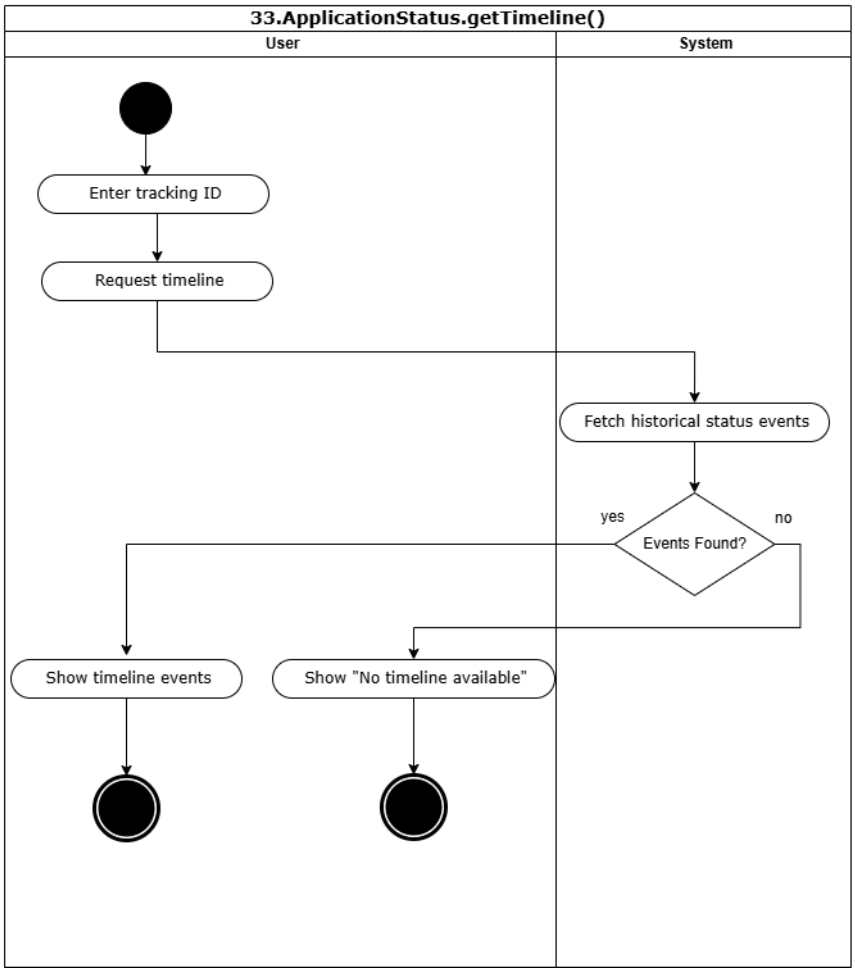

28.RecordManager.searchRecord()
User
System
Enter search criteria (CNIC/ID)
Click Search
Query database for records
yes
no
Records found?
Show matching records
Show "No records found"

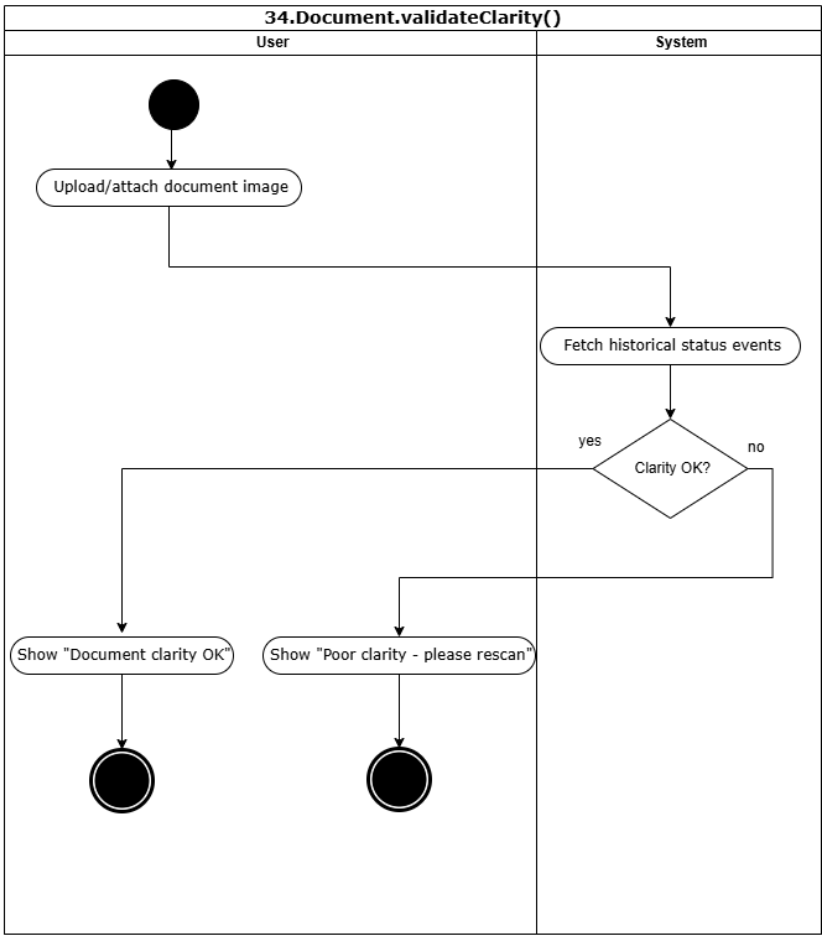

29.RecordManager.updateRecord()
User
System
Enter record fields
Click Save
Validate updates
Presist updated record
yes
no
Save successful?
Show "Update saved"
Show "Update failed"

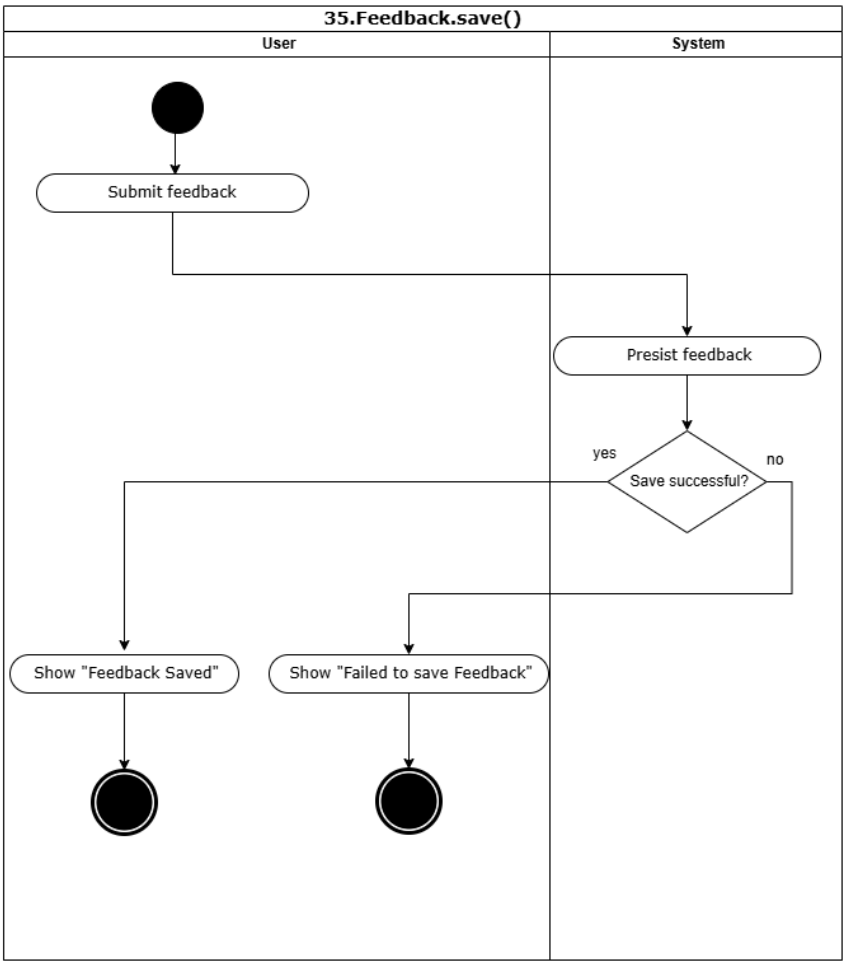

30.OfflineDraft.saveLocally()
User
System
Fill form offline
Click "Save locally"
Write draft to local storage
yes
no
Save successful?
Show "Save draft offline"
Show "Failed to save draft"

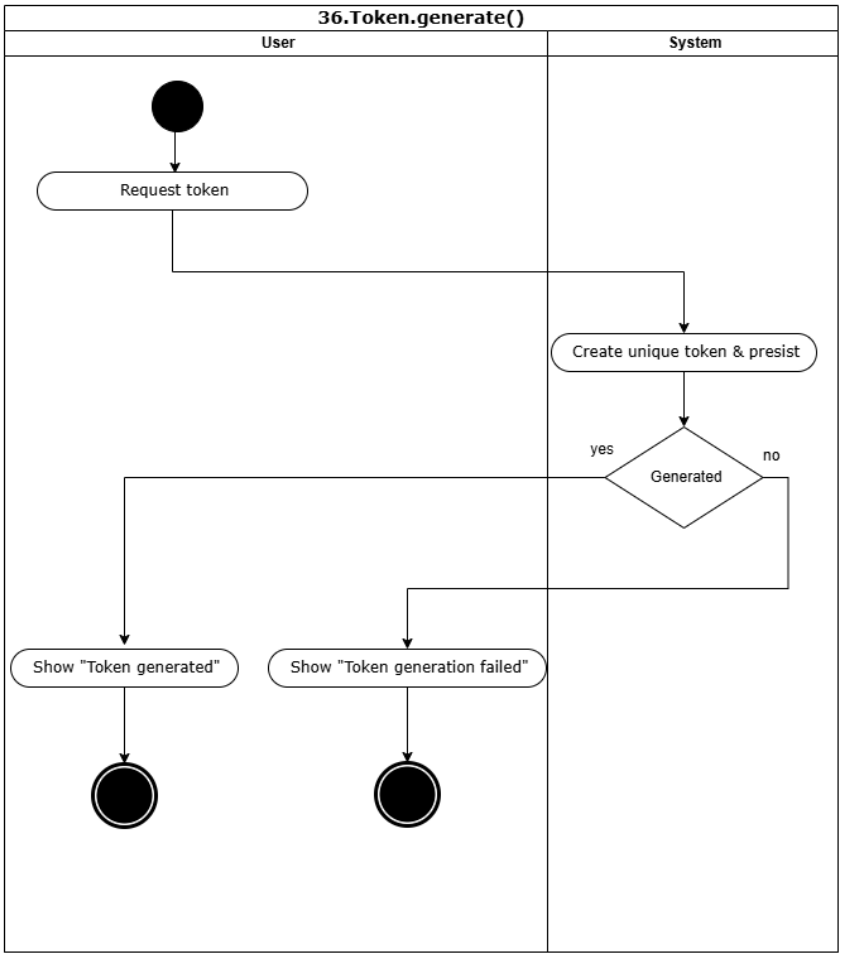

31. OfflineDraft.sync()
User
System
Open "Sync drafts"
Click Sync
Check network & upload drafts
yes
Sync successful?
no
Show "Sync complete"
Show "Sync failed - no network"

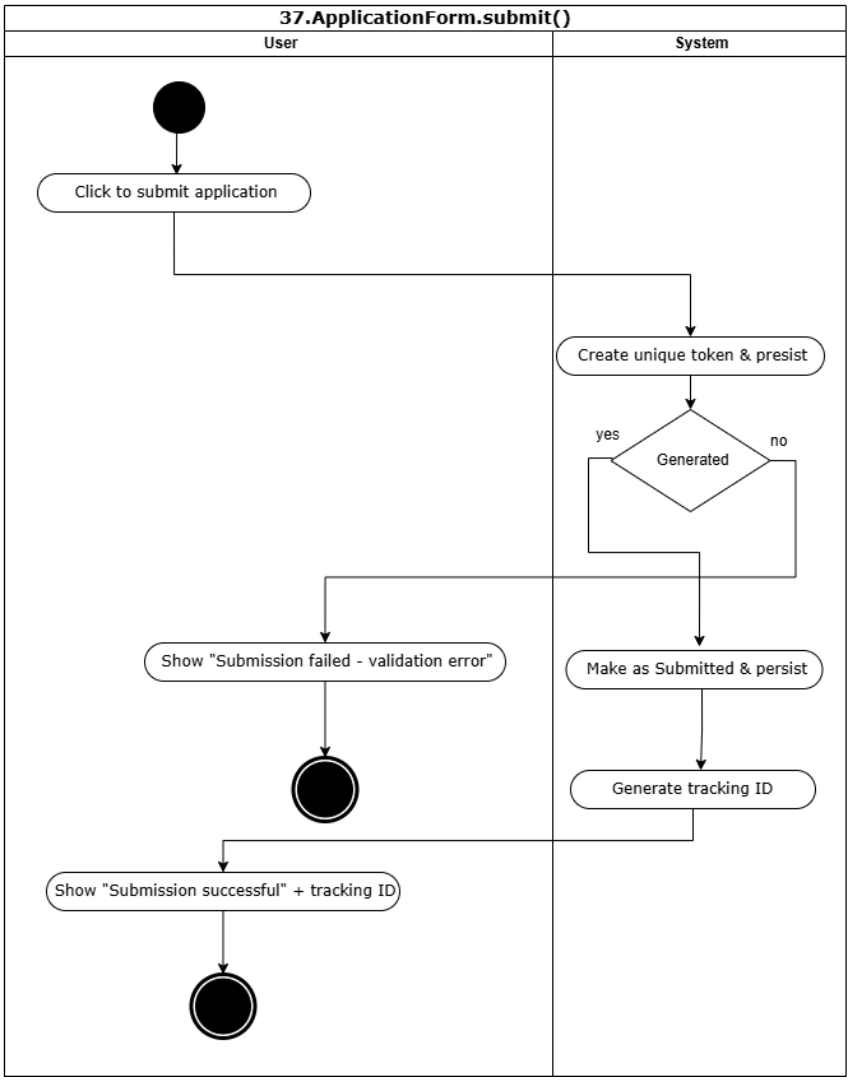

32.ApplicationStatus.getStatus()
User
System
Enter tracking ID
Request status
Lookup current stage
yes
Found?
no
Show "Current Status"
Show "Tracking ID not found"

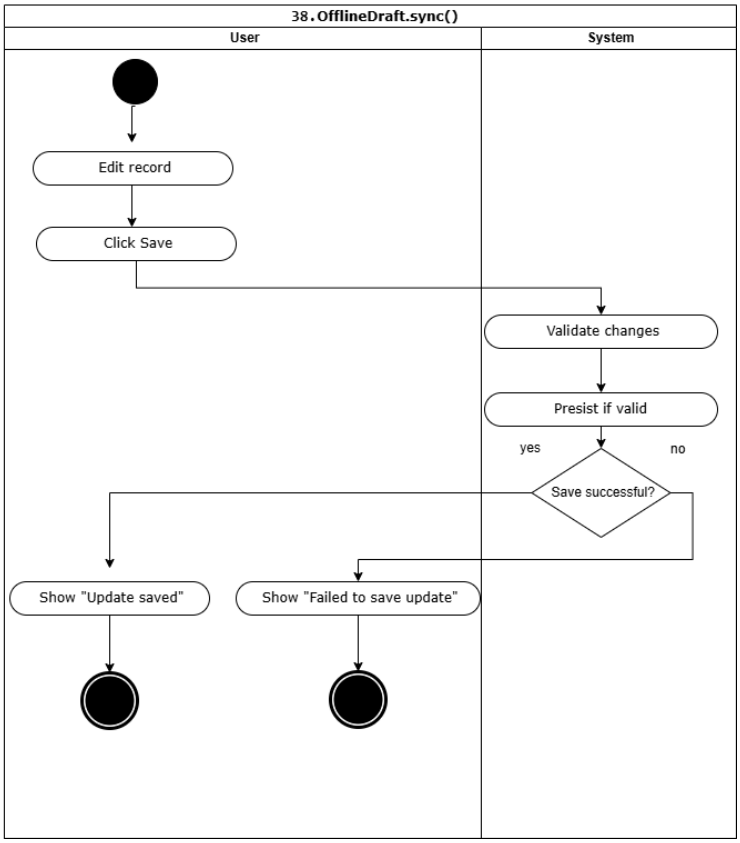

33.ApplicationStatus.getTimeline()
User
System
Enter tracking ID
Request timeline
Fetch historical status events
yes
Events Found?
no
Show timeline events
Show "No timeline available"


34.Document.validateClarity()
User
System
Upload/attach document image
Fetch historical status events
yes
Clarity OK?
no
Show "Document clarity OK"
Show "Poor clarity - please rescan"


35.Feedback.save()
User
System
Submit feedback
Presist feedback
yes
Save successful?
no
Show "Feedback Saved"
Show "Failed to save Feedback"


36.Token.generate()
User
System
Request token
Create unique token & presist
yes
Generated
no
Show "Token generated"
Show "Token generation failed"


37.ApplicationForm.submit()
User
System
Click to submit application
Create unique token & presist
yes
Generated
no
Show "Submission failed - validation error"
Make as Submitted & persist
Generate tracking ID
Show "Submission successful" + tracking ID


38. OfflineDraft.sync()
User
System
Edit record
Click Save
Validate changes
Presist if valid
yes
no
Save successful?
Show "Update saved"
Show "Failed to save update"