**Process Design Document (PDD)**

**Process Name: Teacher Application Review Automation**

**1. Process Overview**

This process automates the review and approval/rejection of teacher applications submitted on the platform. Teachers submit their information, including their CV and specialization category. The robot reviews the data, applies pre-defined rules, and decides whether to accept or reject the application. The decision is followed by sending an email to the applicant. The process uses a **Dispatcher** and **Performer** model.

**2. Objectives**

* Automate the application review process.
* Reduce manual work and decision-making errors.
* Ensure consistent communication with applicants.

**3. Process Workflow**

**Dispatcher Workflow:**

1. **Input Source:**
   * Read pending applications from the admin dashboard or database.
   * Extract relevant details: Teacher name, email, specialization category, CV (file path), and years of experience.
2. **Queue Creation:**
   * Push each application as a transaction item to the Orchestrator queue with the following information:
     + Teacher Name
     + Email Address
     + Specialization
     + CV Path
     + Years of Experience
     + Submission ID
3. **Queue Item Status:**
   * Mark the status of each item as "New."

**Performer Workflow:**

1. **Input Source:**
   * Fetch transaction items from the Orchestrator queue.
2. **Business Rules:**
   * Analyze the application details based on the following criteria:
     + **Specialization:** Check if the category is listed in the platform's requirements.
     + **Years of Experience:** Must be greater than or equal to 3 years.
     + **CV Content:** Look for specific keywords in the CV, such as:
       - Keywords: "Bachelor's Degree," "Teaching Certificate," "5 years of experience," "IELTS," or similar relevant terms.
3. **Decision:**
   * **Accept:** If all criteria are met.
   * **Reject:** If any criteria are not met.
4. **Email Communication:**
   * Use SMTP to send an email to the applicant based on the decision:
     + **Acceptance Email:** Includes confirmation and next steps for using the platform.
     + **Rejection Email:** Includes reasons for rejection and encouragement to reapply.
5. **Update Queue Status:**
   * Mark the transaction as "Successful" or "Failed" in the Orchestrator.

**4. Process Details**

**Input Data:**

* **Source:** Admin dashboard or database.
* **Data Fields:**
  + Teacher Name
  + Email Address
  + Specialization
  + Years of Experience
  + CV (file path or binary content)

**Output Data:**

* Status of application (Accepted/Rejected).
* Email sent to the applicant.
* Queue item updated in the Orchestrator.

**5. Business Rules**

| **Rule** | **Condition** | **Outcome** |
| --- | --- | --- |
| Specialization Validity | Specialization matches one of the required categories. | Proceed to next step. |
| Experience Check | Years of experience >= 3 years. | Proceed to next step. |
| CV Content Analysis | CV contains specific keywords (e.g., "Bachelor's Degree," "Teaching Certificate"). | Proceed to next step. |
| Email Format Validation | Applicant's email address is valid. | Proceed to next step. |
| Any rule not met | If any of the above rules fail. | Reject application. |

**6. CV Analysis Details**

To extract useful information from the CV:

1. Use UiPath activities like **Read PDF Text** or **Read Text File** to extract the content.
2. Apply string manipulation or **Regex** to search for specific keywords:
   * Example Regex for degrees: (Bachelor's|Master's|PhD)
   * Example Regex for certifications: (Teaching Certificate|IELTS)
3. Check for structured patterns indicating years of experience (e.g., "[0-9]+ years of experience").

**7. Email Templates**

**Acceptance Email:**

**Subject:** Congratulations, Your Application is Approved!

**Body:** Dear [Teacher Name],

We are pleased to inform you that your application has been approved. You now have access to publish courses and articles on our platform. Please log in to your account to get started.

Best regards,  
[Platform Name] Team

**Rejection Email:**

**Subject:** Your Application Status

**Body:** Dear [Teacher Name],

Thank you for your interest in joining our platform. After reviewing your application, we regret to inform you that it does not meet our current requirements. We encourage you to review the criteria and reapply in the future.

Best regards,  
[Platform Name] Team

**8. Improvements and Suggestions**

1. **Add Machine Learning:** Use a basic ML model to analyze CVs for better accuracy.
2. **Dynamic Criteria:** Allow the admin to update the approval criteria from the dashboard.
3. **Track Application Status:** Add a tracking feature for applicants to view the status of their requests in real-time.

**9. Tools and Activities Used**

1. **Dispatcher:**
   * UiPath Orchestrator Queues.
   * Database/HTTP Activities for fetching data.
2. **Performer:**
   * Regex and string manipulations for CV analysis.
   * SMTP activities for sending emails.
   * Decision-making using If/Else or Switch activities.

**10. Assumptions**

* The database or admin dashboard is accessible.
* Email credentials for SMTP are configured and functional.
* CVs are in a readable format (PDF/Word).

**11. Exceptions and Handling**

1. **Database Connection Issues:**
   * Log the error and retry connection.
2. **Unreadable CV File:**
   * Mark the item as "Failed" and notify the admin.
3. **Email Sending Failure:**
   * Retry sending the email; if it fails, log the error and move to the next transaction.

**12. Conclusion**

This RPA solution streamlines the teacher application review process, ensuring efficiency and accuracy. It minimizes manual effort while maintaining clear communication with applicants. Future enhancements can include machine learning for CV analysis and dynamic approval criteria management.