**Computerized Document Tracking System**

**Proposed Workflow**

**1. User Login**

* **Actor**: Desk (e.g., department/section).
* **Fields for Login**:
  + **Desk ID**: Unique identifier for the desk.
  + **Password**: Secure login credentials.

**2. Document Creation**

* **Actor**: Sender Desk (logged-in user).
* **Fields to Fill**:
  + **Brief Description**: A short note about the document.
  + **Quantity**: Number of items being sent.
  + **From Desk No**: Automatically filled with the sender's **Desk ID**.
  + **To Desk No**: Selected from a dropdown of registered desks.
  + **Status**: Default as "IN".
  + **Created Date**: Automatically generated timestamp.
* **Action**: Once saved, the document entry will be logged, and the system can generate a **printable label** containing all details.

**3. Document in Transit**

* **Actor**: Sender Desk or Peon.
* **System Action**:
  + The document's **status** updates to "In Transit".
  + It appears in the recipient desk’s **"Awaiting Receive" list**.

**4. Document Receipt**

* **Actor**: Recipient Desk (logged-in user).
* **Action**:
  + The recipient desk logs in and sees a list of documents "In Transit."
  + They click an **"Accept"** button to acknowledge receipt.
  + Status updates to "Received".
  + The recipient desk can now add a new **To Desk No** for subsequent transfer.
  + Optionally, the recipient signs the manual peon book as acknowledgment.

**5. Reporting and Tracking**

* **Actor**: Any Desk or Administrator.
* **Features**:
  + View all document entries in a specific **Peon Book** (via its **Unique Serial Number**).
  + Check status updates for any document:
    - **IN**: Document is being prepared.
    - **In Transit**: Document is on its way.
    - **Received**: Document has been received by the recipient desk.

**Database Design**

**1. Desk\_Table**

| **Field** | **Type** | **Description** |
| --- | --- | --- |
| unique\_id | Integer | Unique ID for each desk. |
| department | CharField | Department name. |
| section\_name | CharField | Section name. |
| password | CharField | Encrypted password for login. |

**2. Peon\_Book**

| **Field** | **Type** | **Description** |
| --- | --- | --- |
| unique\_no | AutoField | Unique identifier for each peon book entry. |
| description | TextField | Short description of the document. |
| qty | Integer | Quantity of items. |
| created\_date | DateTime | Automatically generated timestamp. |
| from\_desk\_no | ForeignKey | Desk ID of the sender. |
| to\_desk\_no | ForeignKey | Desk ID of the recipient. |
| status | CharField | Document status ("IN", "In Transit", "Received"). |

**System Features**

**1. Login System**

* Allow desks to log in using their **Desk ID** and **password**.
* Redirect to respective dashboards based on role (e.g., sender/recipient).

**2. Peon Book Management**

* Allow sender desks to create new entries.
* Auto-assign **from\_desk\_no** based on login ID.
* Enable the sender to select a recipient **to\_desk\_no** from the dropdown.

**3. Transit Management**

* Automatically update document status to "In Transit" once sent.
* Display pending documents under "Awaiting Receive" for the recipient desk.

**4. Acknowledgment**

* Allow recipient desks to click **"Accept"** to confirm receipt.
* Log acknowledgment in the system with timestamps.
* Update status to "Received".

**5. Reporting**

* **Administrator View**: Allow viewing all records with filters (by date, desk, or document status).
* **Desk View**: Allow desks to view the movement history of their documents.

**Workflow Diagram**

**Step 1: Document Creation**

sql

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Sender Desk → Logs into System → Creates Peon Book Entry → Prints Label

**Step 2: Transit**

mathematica

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Sender Desk → Sends Document → Status: "In Transit" → Displays in Recipient's Awaiting List

**Step 3: Acknowledgment**

sql

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Recipient Desk → Logs into System → Accepts Document → Status: "Received"

**Step 4: Subsequent Transfer**

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Recipient Desk → Reassigns Document to New Desk → Status: "In Transit"

**Advantages of the System**

1. **Centralized Tracking**: All document movements are recorded and accessible to authorized desks.
2. **Efficient Communication**: Real-time updates on the status of documents.
3. **Dual Operation**: Run concurrently with the manual system during the trial phase.
4. **Accountability**: Every movement is logged, reducing the chances of misplacement.