Here’s a \*\*well-structured and professional document\*\* for your \*\*Farm IT Workflow Documentation\*\*. This document is formatted for clarity and readability, making it suitable for formal use.

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# \*\*Farm IT - Workflow Documentation\*\*

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## \*\*1. Introduction\*\*

\*\*Farm IT\*\* is a digital platform designed to bridge the gap between \*\*farmers\*\* seeking financial assistance and \*\*investors\*\* willing to provide funds. The platform facilitates secure management of loans, investments, and repayments while allowing \*\*administrators\*\* to configure financial settings and oversee the entire system.

The platform ensures transparency, security, and efficiency in financial transactions, enabling farmers to grow their businesses and investors to earn returns on their investments.

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## \*\*2. Workflow Overview\*\*

The workflow of Farm IT is divided into three main user roles: \*\*Farmers\*\*, \*\*Investors\*\*, and \*\*Admins\*\*. Each role has specific functionalities and workflows, which are explained in detail below.

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### \*\*2.1 Home Page\*\*

The \*\*Home Page\*\* serves as the landing page for all users. It provides an overview of the platform's features, including:

- A welcoming message.

- Key features such as farm management, secure investments, and real-time tracking.

- Call-to-action buttons for \*\*Login\*\* and \*\*Register\*\*.

![](media/image1.png)

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### \*\*2.2 Register Page\*\*

Users (farmers and investors) can register on the platform by providing necessary details. The registration process includes:

- Inputting personal information.

- Uploading a profile picture.

- Submitting the registration form for \*\*Admin Verification\*\*.

![](media/image2.png)

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### \*\*2.3 Admin Verification\*\*

After registration, the \*\*Admin\*\* must verify the user's account before they can log in. This step ensures that only legitimate users can access the platform.

![](media/image3.png)

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### \*\*2.4 Login Page\*\*

Once verified, users can log in using their credentials. The system redirects users to their respective dashboards based on their roles (Farmer, Investor, or Admin).

![](media/image4.png)

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### \*\*2.5 Farmer Dashboard\*\*

The \*\*Farmer Dashboard\*\* is the central hub for farmers. It allows them to:

- View their profile.

- Manage farms.

- Request loans.

- Track repayments and transactions.

![](media/image5.png)

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### \*\*2.6 Farmer Profile\*\*

Farmers must upload identity and farm ownership documents for verification. Without \*\*Admin Verification\*\*, farmers cannot add farms or request loans.

![](media/image6.png)

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### \*\*2.7 Document Verification by Admin\*\*

The \*\*Admin\*\* reviews and verifies the documents submitted by farmers. If the documents are correct, the Admin approves them, enabling farmers to proceed with farm creation and loan requests.

![](media/image7.png)

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### \*\*2.8 Document Status Update\*\*

Once the Admin verifies the documents, the status is updated in the farmer's profile.

![](media/image8.png)

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### \*\*2.9 Add Farms\*\*

After document verification, farmers can add their farms to the platform. This includes providing farm details such as location, size, and type.

![](media/image9.png)

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### \*\*2.10 My Farms (Farmer)\*\*

Farmers can view, edit, delete, and manage their farms. They can also raise loan requests for specific farms.

- \*\*Edit Farm\*\*: Farmers can update farm details.

- \*\*Request Loan\*\*: Farmers can submit loan requests, which will appear in the \*\*Investor Dashboard\*\*.

![](media/image10.png)

![](media/image11.png)

![](media/image12.png)

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### \*\*2.11 Investor Dashboard\*\*

The \*\*Investor Dashboard\*\* displays all available loan requests. Investors can browse farms and invest in loans by filling out an investment form.

![](media/image13.png)

![](media/image14.png)

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### \*\*2.12 Verify and Approve Investment (Admin)\*\*

The \*\*Admin\*\* verifies and approves investments. Once approved, the investment amount is credited to the farmer's account and debited from the investor's account.

![](media/image15.png)

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### \*\*2.13 Farmer My Loans\*\*

Farmers can view their loan details, including repayment schedules. They can also repay loans directly from this section.

![](media/image16.png)

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### \*\*2.14 Transactions\*\*

The \*\*Transactions\*\* section displays all financial activities, including investments and repayments. Users can view detailed transaction histories.

![](media/image17.png)

![](media/image18.png)

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### \*\*2.15 Report Issue\*\*

Users can report any issues or challenges they face while using the platform. The \*\*Admin\*\* reviews and resolves these issues.

![](media/image19.png)

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### \*\*2.16 Transaction Analytics (Investor)\*\*

Investors can track their investments and view financial analytics, including returns and repayment schedules.

![](media/image20.png)

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### \*\*2.17 Admin Dashboard\*\*

The \*\*Admin Dashboard\*\* provides a comprehensive view of all loans, repayments, and user activities. Admins can also view repayment schedules and loan details.

![](media/image21.png)

![](media/image22.png)

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### \*\*2.18 Admin - View Issues\*\*

Admins can view and resolve issues reported by users.

![](media/image23.png)

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## \*\*3. User Roles & Features\*\*

### \*\*3.1 Farmers\*\*

Farmers can:

- Register and log in.

- Upload identity and farm ownership documents.

- Create and manage farms.

- Request loans with interest rates and repayment plans.

- Repay loans and track repayment schedules.

- View investment and repayment details.

- Report issues.

### \*\*3.2 Investors\*\*

Investors can:

- Register and log in.

- Browse available farms and loan requests.

- Invest in farm loans.

- Monitor investments and track earnings.

- View repayment schedules.

- Access financial analytics.

### \*\*3.3 Admin\*\*

Admins can:

- Verify and approve user registrations.

- Review and verify documents.

- Monitor farms and loan requests.

- Approve or reject investments.

- Manage all transactions.

- Resolve user-reported issues.

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## \*\*4. System Flow\*\*

### \*\*4.1 User Authentication\*\*

- \*\*User Registration\*\*: `POST /register` (Registers a new user).

- \*\*Admin Verification\*\*: `PUT /:id/verify` (Admin verifies new users).

- \*\*Delete Suspicious Users\*\*: `DELETE /:id` (Admin deletes suspicious accounts).

- \*\*User Login\*\*: `POST /login` (Users log in and are redirected based on their role).

### \*\*4.2 Farmer Workflow\*\*

- \*\*Upload Document\*\*: `POST /upload` (Farmers submit verification documents).

- \*\*Admin Document Verification\*\*: `PUT /documents/:id/verify` (Admin verifies documents).

- \*\*Create Farm\*\*: `POST /farms/` (Farmers create a farm).

- \*\*Manage Farms\*\*: `GET /my-farms`, `PUT /farms/:id`, `DELETE /farms/:id` (View, update, or delete farms).

- \*\*Request Loan\*\*: `POST /loans/create` (Farmers request loans).

- \*\*View My Loans\*\*: `GET /my-loans` (Farmers track their loans).

- \*\*Repayment Schedule\*\*: `GET /loans/:id/repayment-schedule` (Farmers view repayment details).

- \*\*Repay Loan\*\*: `POST /loans/:id/repay` (Farmers repay loans).

- \*\*Transaction Details\*\*: `GET /transactions/my-transactions`, `GET /transaction/:id` (Farmers check transaction details).

- \*\*Report Issue\*\*: `POST /add-issue` (Farmers report issues).

### \*\*4.3 Investor Workflow\*\*

- \*\*Browse Farms\*\*: `GET /farms/all-farms` (Investors explore available farms).

- \*\*View Available Loans\*\*: `GET /loans/available-loans` (Investors check loans open for investment).

- \*\*Invest in Loan\*\*: `POST /loans/:id/invest` (Investors invest in a farm loan).

- \*\*Track Investments\*\*: `GET /my-investments` (Investors monitor their investments).

- \*\*View Repayment Schedule\*\*: `GET /transactions/my-transactions`, `GET /transaction/:id` (Investors check repayment details).

- \*\*Transaction Analytics\*\*: `GET /transactions/analytics` (Investors check financial analytics).

### \*\*4.4 Admin Workflow\*\*

- \*\*Manage Users\*\*: `PUT /:id/verify`, `DELETE /:id`, `GET /` (Admin verifies, deletes, and views users).

- \*\*Document Verification\*\*: `GET /all-documents`, `PUT /documents/:id/verify` (Admin reviews documents).

- \*\*Farm & Loan Management\*\*: `GET /farms`, `GET /loans`, `GET /all-issues` (Admin monitors farms, loans, and issues).

- \*\*Investment Approval\*\*: `GET /pending-investments`, `POST /verify-investment`, `POST /credit-investment` (Admin approves and credits investments).

- \*\*Transaction Management\*\*: `GET /admin/all-transactions` (Admin oversees transactions).

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## \*\*5. Backend Implementation Details\*\*

- \*\*Authentication\*\*: Uses \*\*JWT-based authentication\*\* and middleware for security.

- \*\*Transactions\*\*: Securely records all financial transactions.

- \*\*Investment Management\*\*: Tracks funds, repayments, and investment progress.

- \*\*Error Handling & Logging\*\*: Logs errors for debugging and ensures data validation.

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## \*\*6. Conclusion\*\*

\*\*Farm IT\*\* is a robust platform that streamlines financial interactions between farmers and investors. It ensures transparency, security, and efficiency in managing loans, investments, and repayments. The system's well-defined workflow and role-based access control make it a reliable solution for agricultural financial management.

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This document provides a \*\*clear, professional, and detailed explanation\*\* of the Farm IT workflow, suitable for formal use. Let me know if you need further refinements!