

# Mammoth OSMS V32: Core Workflows Guide

A definitive operations manual for the  
5 Elements Portal Engine.



Security



Dashboard



Data

# System Initialisation

Route: /setup

```
mkdir /data/db  
touch /etc/config.yaml
```

1

## Create Master Admin

Input: Master Username.  
Establishing the absolute root authority.

```
const master = new Admin();  
master.setCredentials(usr, pwd);
```

2

## Forge Master Key

Input: Secure Password  
(Min. 6 characters).



```
db.migrate.latest();  
server.listen(3000);
```

3

## Launch Engine

Action: Build Database & Launch.  
Automatically generates the  
SQLite .db architecture and boots  
the login protocol.



**Security Warning:** The /setup route locks permanently once the Master Admin is created.

# Role-Based Access Control Architecture

	Master Admin	Clerk
Dashboard & Analytics	✓	✓
Student Admissions & Profiles	✓	✓
Fee Collection & Receipts	✓	✓
Faculty Payroll Generation	✓	✗
Auto-Roll & Rank Calculation	✓	✗
System Configurations & Backups	✓	✗



## Master Password Protocol

Even logged-in Admins must re-enter their Master Key to execute destructive actions (e.g., deleting records, editing fee ledgers).

# The Command Centre (Dashboard Anatomy)

## Stats Counter

Tracks Total Students, Active Faculty, and flags Current Month Fee Defaulters.

## Top Faculty Leaderboard

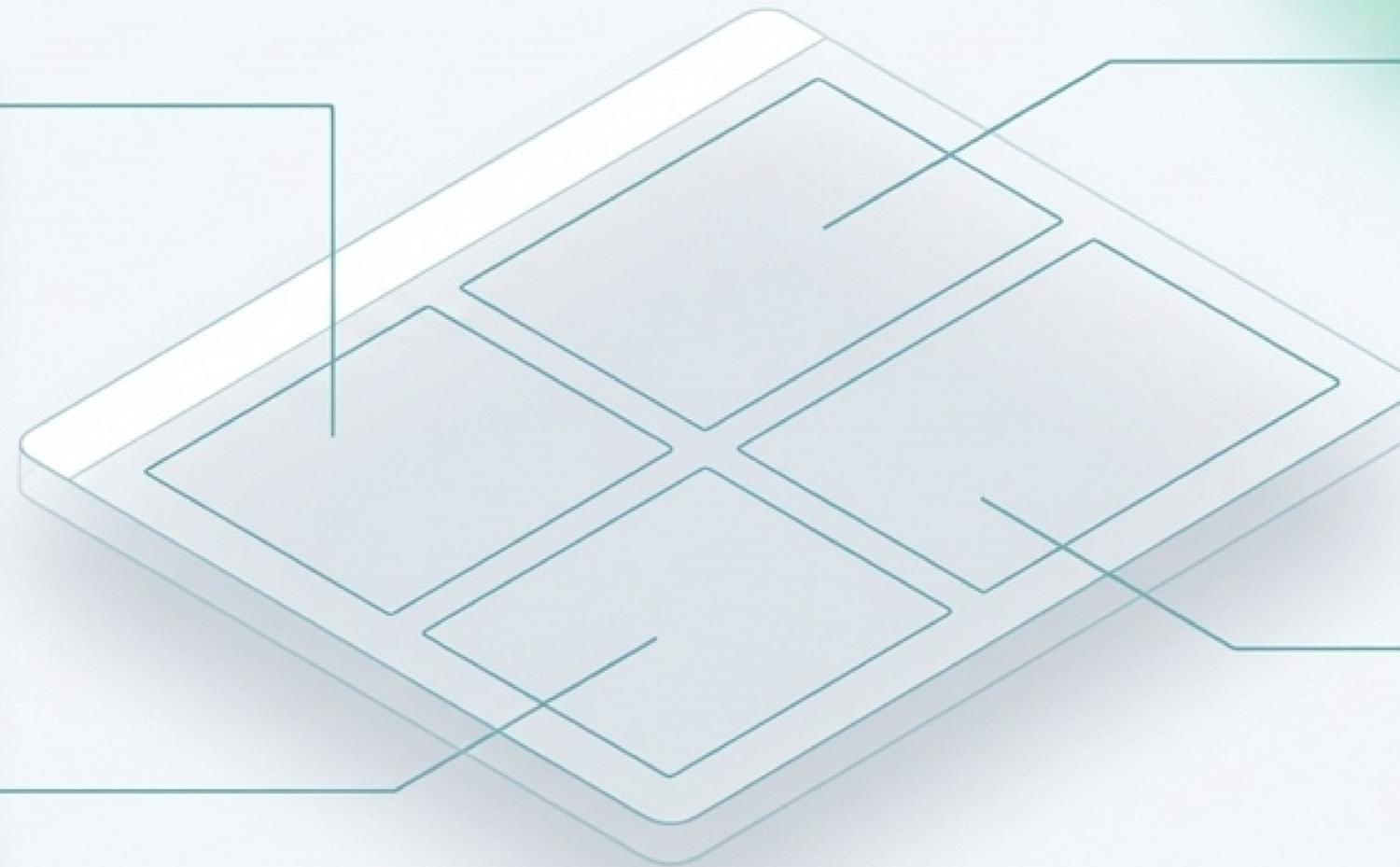
Automatically ranks staff out of 5.0 based on internal performance reviews.

## Official Broadcasts

The Notice Board module for institution-wide alerts.

## Recent Revenue Ledger

A live-updating feed of the latest fee payments highlighting RCP receipt numbers and amounts.



# The Student Admission Pipeline

**Academic Details**  
(Target Class, Section)

**Personal Details**  
(Name, Guardian Phone,  
Address, Photograph)

**Mammoth  
Processing  
Engine**

Securely hashes data, assigns roster,  
and generates sequential System  
ID (e.g., STU-1001).



## **Official ID Badge**

Auto-formats photo and  
details into an 85.6x54mm  
printable card.



## **Blank Report Card**

Ready for future Marks  
entry and Rank calculations.

# The Fee Collection Split-Engine

## Payment Execution

1. Select Student



2. Define Period (Month/Year)



3. Input Amount & Method (Cash/UPI/Bank)



RCP-YYYYMM  
PDF Receipt

*Computer-generated, no signature required.*

## Defaulters Radar

Student	ID
	125200081
	128010082
	125010083
	125010204
	123010206

The system automatically cross-references all active students against current month payments, instantly flagging any accounts that have not yet settled their ledger.

# System Maintenance: Backup & Restore

1-Click execution

Packages all settings,  
classes, students,  
and ledgers

Outputs a portable,  
encrypted Excel file



.xlsx Master  
Backup Vault

**Restore Engine**

Warning: Overwrites current data.



Valid .xlsx  
backup file

Master Admin  
Password

# Synthesis: The Mammoth Data Ecosystem

