Architectural Overview of the Expense Management System (EXAMS) in MVC Style

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The Expense Management System (EXAMS) is architecturally structured in the MVC (Model-View-Controller) style, with distinct components each carrying specific responsibilities.

Model Layer:

In the Model layer, the system's data-related operations are managed by entities and the Data Management component. Entities handle the representation of data, while the Data Management component is responsible for interacting with the database through the JDBC interface, serving as a mediator between entities and controllers.

Controller Layer:

At the Controller level, various components handle specific functionalities:

User Management Component: Manages employee registration and user login.

Identity Management Component: Ensures authentication and verifies users' roles through the userInRole method.

Claims Management Component: Handles the recording, editing, deletion, and retrieval of expense claims.

Payment Component: Manages the confirmation or approval of expense claims for payment.

Audit Component: Filters claims based on provided criteria, streamlining the audit process.

Notifications Component: Orchestrates email-based notifications within the system.

View Layer:

In the View layer, the View Controller component takes charge of handling views. This component retrieves the appropriate views and establishes connections with corresponding controllers, promoting a separation of concerns and maintaining a modular structure within the system. The View Controller acts as a crucial link between the user interface and the underlying business logic, ensuring a clean and organized architectural hierarchy.

The overall architecture demonstrates a well-defined structure, aligning with MVC principles to optimize clarity, efficiency, and modularity in the design and functionality of the Expense Management System (EXAMS).