UML Deployment Diagram

The most appropriate architectural style for our financial management application is the repository model. The rationale for this decision is fairly straightforward. The application will have many sub-systems that are able to compute different figures and statistics based on a user’s financial account transactions. Since all sub-systems will have to draw from the same batch of data, the repository model fits best.

The repository model offers several advantages including an efficient way to share large amounts of data. The sub-systems of this model see data as a black-box, they are not concerned with how it is produced. The repository schema provides a uniform, published model for the sharing of data between sub-systems. However, the repository model carries along with it some disadvantages. The sub-systems must agree on the repository schema, which often leads to compromises. The evolution of repository data is expensive and difficult to maintain. Management policies have no specific scope within the application. The repository can be difficult to distribute efficiently in some cases.