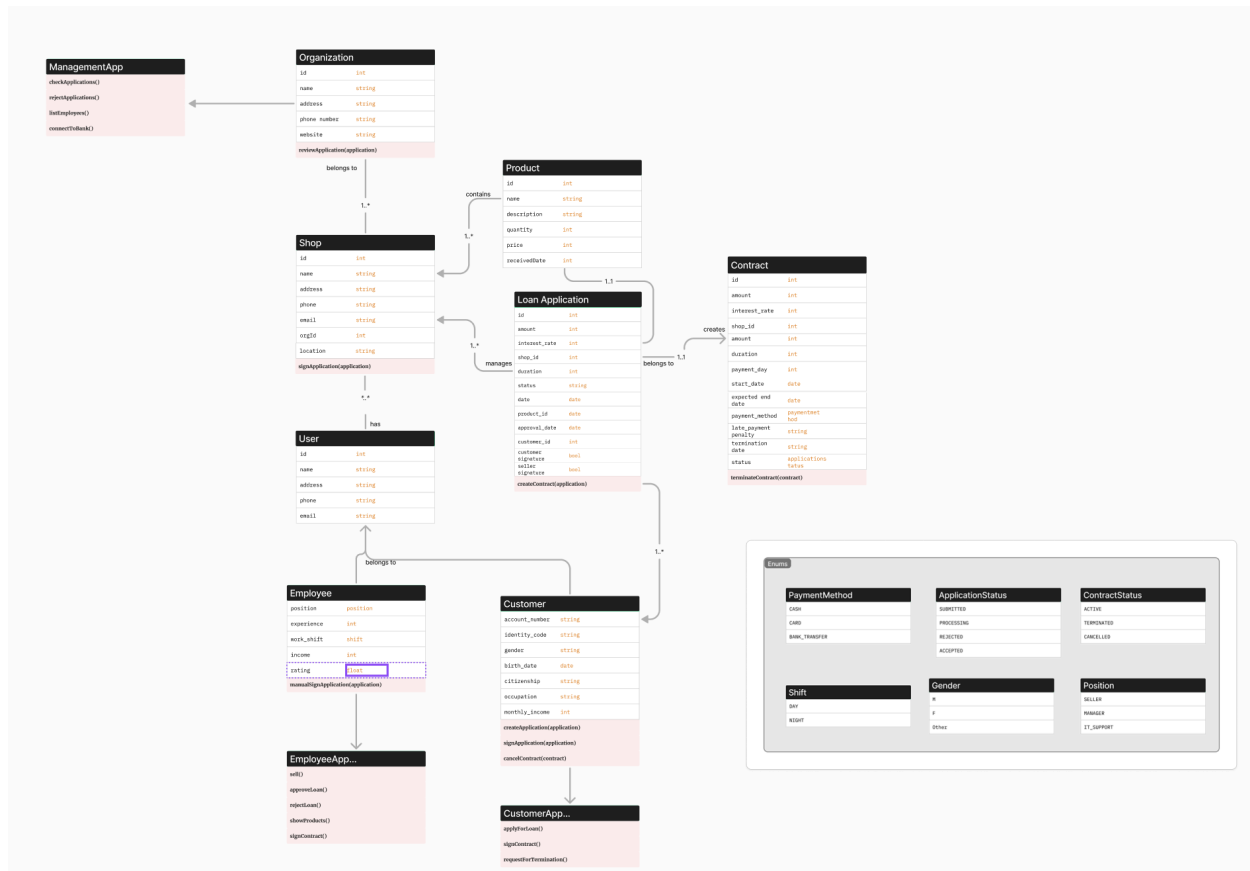


TASK 3



<https://www.figma.com/board/pSn5QPRGnAveXV0f3bPlea/Loan-Application?node-id=0-1&node-type=canvas&t=WTsMtrwZQdWSXa8R-0>

TASK 4

For designing my application class model, I chose **Figma**. The primary reason for this choice was that the initial class model assignment was done in Figma, making it convenient to extend and build upon. Additionally, Figma is user-friendly, with a lot of customization options that facilitate the creation of detailed and visually appealing diagrams. However, Figma does not support automatic code generation from the designed models.

Observations on the Original Model

The original model lacked user interactions, which I identified and addressed by adding the following components:

- **ManagementApp**: This app is designed to manage all shops, providing a centralized interface for shop management.

- **EmployeeApp:** This app allows employees to manage and sign loan applications for customers, streamlining the loan approval process.
- **CustomerApp:** This app enables customers to apply for loans and sign contracts to get loans for purchasing products, enhancing the user experience and accessibility.

I also made changes to the original models by adding and modifying some fields to enhance the functionality and accuracy of the system:

- **Product model:** Added `received_date` to track when products are received, which is essential for inventory management and ensuring the timely processing of goods.
- **Shop:** Added `location` to record the physical location of each shop, which is crucial for managing multiple shop branches and optimizing logistics.
- **LoanApplication:** Changed `organisation_signature` to `seller_signature` to more accurately reflect the party responsible for approving the loan applications, ensuring clear accountability.
- **Employee:** Added `income` and `rating` to provide a comprehensive view of each employee's financial status and performance, aiding in better human resource management and decision-making.

For designing my statechart, I used **draw.io**. This tool is free, modern, and powerful, making it a good choice for creating detailed statecharts. Draw.io also offers integration with popular platforms like Atlassian, Notion, and Google Workspace, which helps in collaborative environments and improves productivity.

Code Generation

Figma does not support auto-generation of code from the designed models, which means that any translation from model to code must be done manually. This limitation can be a drawback as it requires additional effort to ensure that the code accurately reflects the designed model.