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Course: Software Engineering

Experiment: 4

AIM:

1. To understand structured analysis by constructing Data Flow Diagrams (Level-0, Level-1 and Level-2) for the given problem statement.
2. To understand functional decomposition under structured analysis.

DESCRIPTION:

1. **PROBLEM STATEMENT:**
   The Startup Portal aims to develop an integrated platform which can take the online applications for startup enrollment along with their workflow within a single system itself. The system must include the post approval of startup ideas, the CDC Payment by startup as well as meeting scheduling facilities.
   Here, the administrator's role would be to access management system, approve or reject startup ideas, fund approved startups, receive requests to schedule meetings and add any comments/advise the startup if necessary.
   The startup user should be able to register, login and submit ideas. If the startup idea is approved by the admin in the first stage, the user must make the nominal CDC payment before applying for a funding request. Once funded, the user may schedule a meeting with its investor to discuss the potential plan of action. If the startup idea is rejected by the admin, the user must be able to submit another idea if he/she wishes to do so.

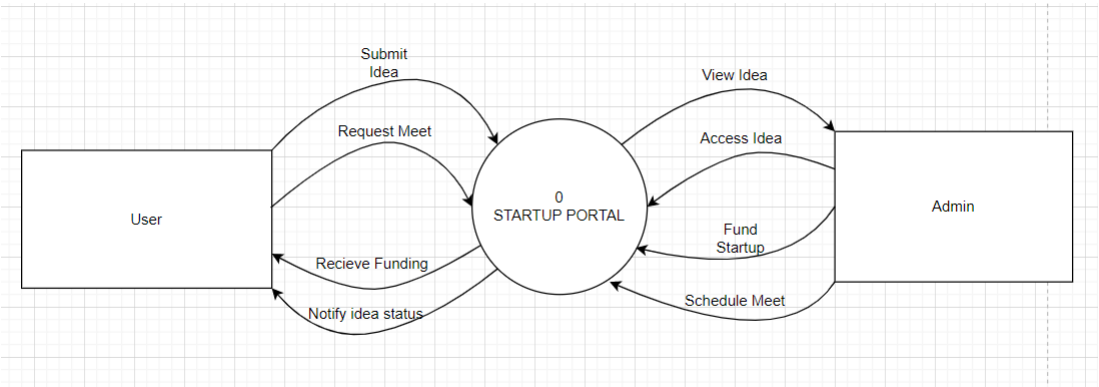
2. **COMMON MISTAKES TO AVOID WHILE DRAWING DATA FLOW DIAGRAMS (DFDs):**

   - Unbalanced DFDs.
   - Forgetting to name the data flows.

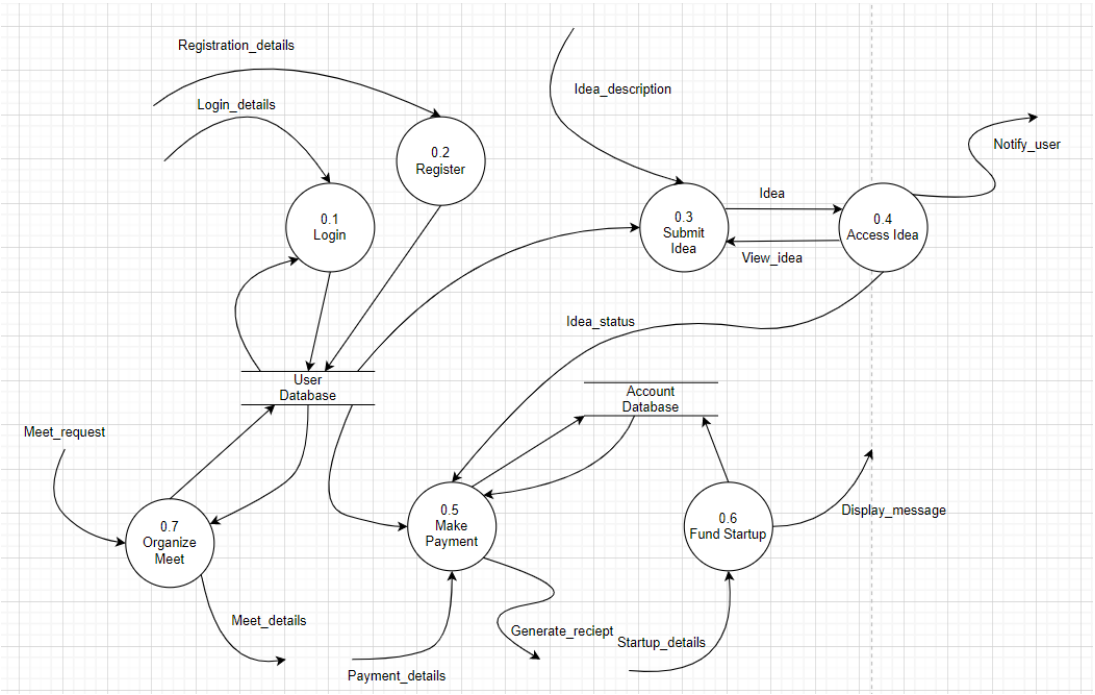
- Unrepresented functions or data.
- External entities appearing at higher level DFDs.
- Trying to represent control aspects.
- Context diagram having more than one bubble.
- A bubble decomposed into too many bubbles at next level.
- Terminating decomposition too early.
- Nouns used in naming bubbles.

3. OUTPUT:

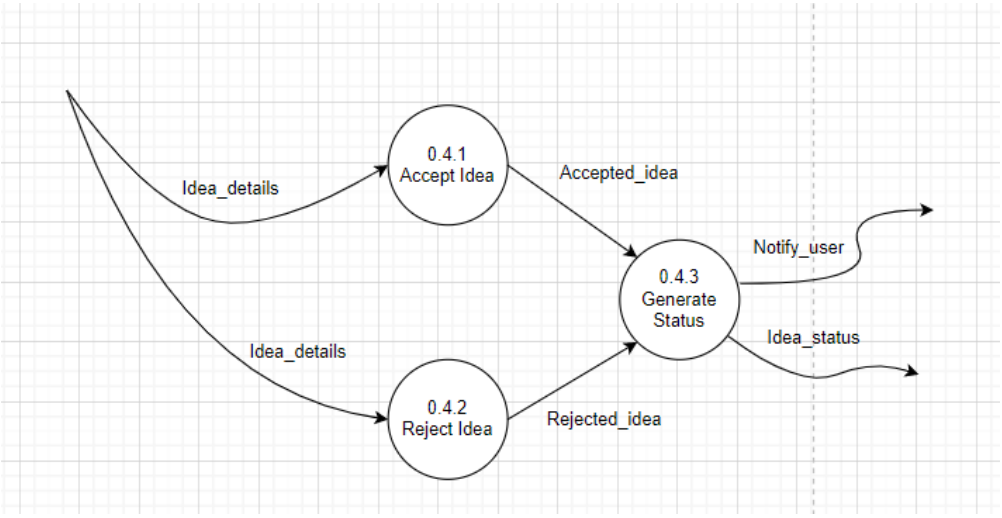
Level-0 DFD



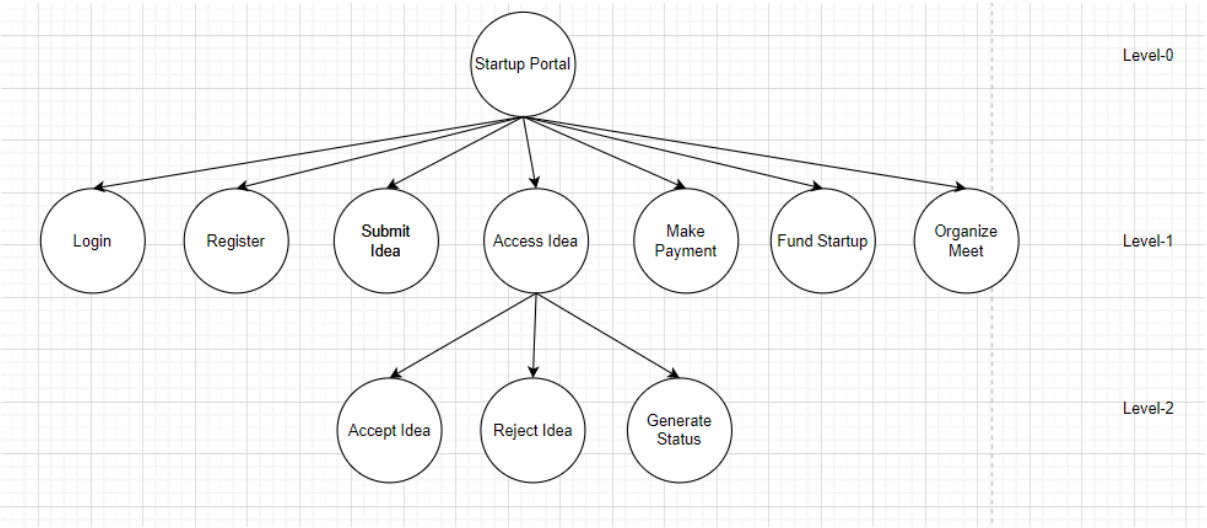
Level-1 DFD



Level-2 DFD



Functional Decomposition



4. CONCLUSION:

From this experiment I learned about structured analysis and functional decomposition and implemented DFDs for the same for the given problem statement (Startup Portal).