# 111 Spring DBMS Final Project

**Crowdfunding Platform** 

## Examples of Crowdfunding Platforms

- https://www.kickstarter.com/
- https://www.zeczec.com/
- https://www.flyingv.cc/
- https://wabay.tw/

#### Scenario – Non-Member

George wants to build up a **crowdfunding platform**. The following description applies all users who have not registered and logged in as members of the platform:

- 1. The homepage would list the most popular proposals, and the popularity indicates the number of clicks.
- 2. Users can search for proposals with keywords on the platform.

#### Scenario – Members

George wants to build up a **crowdfunding platform**. The following description applies all members who have registered on the platform and are logged in:

- 1. The homepage would list the proposals followed by the member and those recommended by the system, both are listed by category.
- 2. Members may follow one or multiple proposals.
- 3. Members may interact with the proposer by leaving the comment in the proposal comment area.
- 4. A member may also be a proposer.
- 5. Members may sponsor one or multiple proposals.

#### Scenario – Members

George wants to build up a **crowdfunding platform**. The following description applies all members who have registered on the platform and are logged in:

- 6. Members are allowed to sponsor a proposal multiple times.
- 7. Members may only sponsor ongoing/active proposals.
- 8. After the proposer makes a proposal, it must be reviewed by the platform before being displayed on the webpage.
- 9. Proposers may edit the proposal content, FAQ and reply to comments after the proposal is published.
- 10. After the proposer creates a proposal, he/she can invite other members to become co-proposers, who can also edit the content of the proposal, FAQ, and reply to messages.

#### Scenario – Members

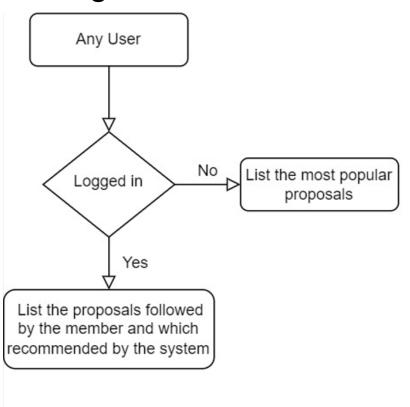
George wants to build up a **crowdfunding platform**. The following description applies all members who have registered on the platform and are logged in:

- 11. Each proposal has 90 days period for fundraising, after which the system would forcibly stop the proposal, but if 90% of the target amount has been raised at the end of the 90 day period, the proposal is automatically extended for another 30 days. The extension is applied only once.
- 12. There are only three proposals status: (1)UNDER-REVIEWING (2)ONGOING and (3)EXPIRED; the status can only be updated in the order of  $1 \rightarrow 2 \rightarrow 3$ .
- 13. Members may follow proposers.

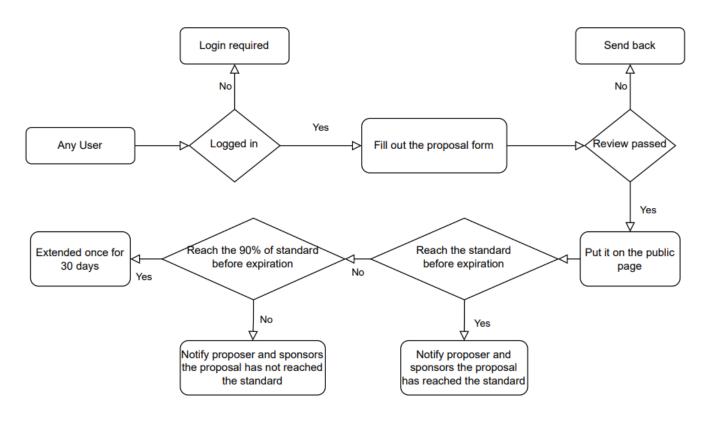
#### **Entities**

- Member(proposer)
- MemberCredential
- Proposal
- ProposalOption (Product under a given proposal)
- Comment
- FAQ
- SponsorRecord (record of which proposal option the member sponsored)
- FollowingRecord
- ProposalMember
- Category

# Flow Chart - Home Page



# Flow Chart - Proposal Process



### **Business logics**

- A user can only have one account.
- A member may also be a proposer.
- Members must be logged in to propose, comment, and sponsor.
- Members can comment on multiple proposals and proposers can reply.
- Each comment would only have one corresponding reply.
- Proposals that have not yet expired are eligible for member sponsor.
- A member may sponsor multiple proposals.
- A member may have multiple proposals.
- A proposal would have one or more products (proposal options), each product would only appear in one proposal.

## **Business logics**

- A proposal may associateted with multiple proposers.
- A member may follow multiple proposals, and each proposal could be followed by multiple members.
- Proposer could update proposals, reply to comments, add/modify/delete FAQs.
- Proposal has only one unique proposal ID.
- After expiration, proposals that have accumulated more than 30 days would be deactivated by the platform.