# **COMP 3004 D1: Proposal**

<u>**Team Name:**</u> Subversive Expectations

**App Name:** Grant Universal

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### **Project Overview**

Grant Universal is an app that provides the user with information when they are looking towards applying and receiving a grant. After the initial process, the app would provide a report on the expenses that are incurred when receiving the grant money. The app works in three stages: grant browsing, application processing and expense report.

# **Purpose**

The purpose of this project is to provide a streamlined platform for communication between grant donors and recipients. It offers services such as a convenient interface used by people or organizations to search for grants that they are eligible for based on requirements in the category of their choosing. In addition, it provides the ability to report their expenses once the grant has been approved and received. This project is also aimed at providing means for the grant donors to review grant applications and assess the progress of the recipients in their endeavours. Every one of the three stages of a grant's life cycle (recipient browsing, application, and reporting) is supported by a line of communication through the exchange of documents and messages between recipients and donors.

An Android mobile platform is ideal for this type of project because it can help provide a simple process into what is needed for research and application for a specific grant. The templating functionality for different kinds of documents can make the interaction easier for people that might be intimidated by the complexity of handling the monetary details of a grant.

# **Functional Requirements**

Users - Our app would be accessible for two kinds of users: grant donors and recipients. Each of them would have different functionality.

- For account creation by applicants, specific documents should be submitted by the user to provide a snapshot of their personal or institutional economic assessment which must be visible by potential grant donors for risk assessment and credit limit determination.
- Recipients should be able to select the type of grant program for which they apply for, and must be shown the list of proper grant donors that have open calls for proposals.
- Grant applications should be handled by the system through forms which the potential grant recipient must fill and submit to the grant donor.
- For grant applications, potential recipients could be able to complete a budget form divided by specific categories which must be provided by the system.
- Grant donor would be able to provide feedback for incomplete or failed applications to the potential recipient.
- Grant donors would be able to review activities and budgets proposed by the potential recipients to approve or deny a grant.
- The system should provide the means for the grant donors to give feedback for failed proposals to help applicants to succeed in future attempts.
- The system should create a schedule of milestones for approved grants based on grant amount, duration of the recipient's project and project risk based on the previous applicant assessment.
- The system should include calendar functionality to keep track and provide reminders for grant milestone dates to both donors and recipients.
- The system should allow for submission of recipient created reports for designated milestones.
- The system should generate a template for milestone reports by including uneditable information on initially approved budget for each expense category.
- The system would allow the recipients to report on their actual expenses for each milestone and their budget projection for the next and remaining milestone periods.
- The system would detect the variance between approved budgets and actual expenses and for discrepancies that are too large (allowance provided as a setting by the donor), it must provide the recipient with a field in the form designed for them to explain such discrepancies.
- The system should be able to keep a history of expense transactions (if the setting is selected by the recipient) to help create the milestone report with a preliminary actual expense amount. Transactions must be manually entered by the user.
- Grant donors should be able to give feedback and adjust predetermined budgets for the next milestone periods according to the report provided by the recipient.

### **Non-functional Requirements**

- System accounts created by either donors or recipients must be private, and should only be accessible by their respective owners.
- Initial budgets on the milestone report templates must not be editable by grant recipients as they contain the budget initially agreed upon by them and the donors and altering them would

incur in financial inaccuracy and dishonesty.

- Report and grant application documents must be only be viewable by the involved parties due to the sensible nature of the information and must be encrypted.

#### **User Scenarios**

### Searching for a grant

A potential grant recipient (regular user) browses through the app to look for available grants in a specified grant program category (research, financial aid, student grant, etc.), which are listed by grant donors. Later the user selects one and starts the application process. This allows for the users to select a grant service from an organization that suits their needs regarding the activities and tasks that they wish to pursue, as well as informing them of as many organizations as possible that are offering those grants.

### Applying for a grant

A potential grant recipient becomes a grant recipient by submitting a proposal explaining their project objectives as well as an expense budgets for the necessary activities. The user receives help from the system by facilitating the creation of expense categories for preliminary budgets and connecting the grant donors to the applying users so that they can ask questions to each other and provide feedback on submitted proposals, both during the first grant application and on subsequent attempts should the first one fail. One of the objective of this app is to streamline the communication process between parties as well as to facilitate the exchange and management of proposal information.

# **Milestone Expense Report Submission**

After a grant proposal has been approved, the recipient is able to send a report of their expenses at the end of their milestone periods (length of that period is set by the donor according to the project risk level). The user will be able to set the values representing how much money they spent (in their local currency, which will be converted to the donor's home currency) or the app will use previously recorded transactions from its calendar (if transaction history is enabled by the user) to help set the value.

Through the app they will receive feedback from the donor as well as the allowed budget for the next milestone period and the rest of the project period. This is important as it allows the donor to ask questions about certain expenses and allows the user to request a higher budget or justify unforeseen expenses. The app will provide the means for these outside-of-form-submission questions to be asked and answered by either party.

## **Non-Functional Requirements explanation**

System accounts contain information that is sensitive for both donors and recipients as they contain financial data that they might wish not to make public. For donors, they might not want other applicants to know how much money they gave to previous applicants with similar projects, as they might be used as leverage by new applicants. Because of this, account information will only be visible to the account owner. Milestone budget reports must only be viewable by both the involved donor and recipient and not third parties for the same reason. As such, they will be encrypted for this purpose.

Initial budgets on milestone report templates are non-editable, because they will be used to compare projected expenses against actual milestone expenses and a malicious recipient might try to change the initial budget of what they said they would expend in order to hide discrepancies and potentially try to get more money unjustifiably from the donor for the next milestone period.