App development project Open university Spring 2023

Milestone 1 - POC

AGENDA



- 1. The Project
- 2. User Roles
- 3. Feature list
- 4. MVP
- 5. Market research
- 6. Efficiency

















THE PROBLEM



Keeping track of shared expenses in a convenient and organized way

OUR SOLUTION



The project will include a bot in one of the messaging apps (Telegram) that will track the expenses of the users in the group and display then on a website for analysis





ADMIN

- Monitors all groups in UI
- Bot handling and category
 management

USER

 View of dashboard in all groups user is included

FEATURE LIST MUST HAVE



- Telegram chat bot
- Supports both group and private chat
- Admin capabilities: data manipulation
- User capabilities: data insertion
- UI dashboard with summaries of the expenses
- Expense tracker
- Analytic graphs
- Group & user hierarchy
- DB manipulation



FEATURE LIST NICE TO HAVE



- Savings goals
- Add income
- Break even
- Access to site via bot no credentials required
- Cyclic payments
- UI payments breakdown

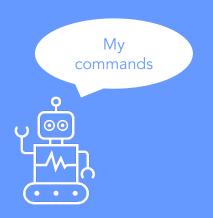




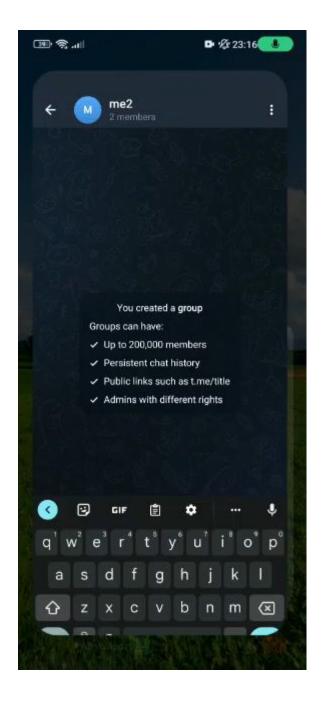




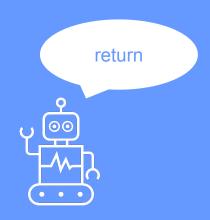
BOT VIEW







BOT COMMANDS



- / show command list
- new add a new expense
- sum get the total expenses in a specific month or year in a pie chart histogram
- list get a list of all your expenses in a specific month or year
- export export the expenses of a given month as excel file
- stop cancel a recurring expense
- help get information about how to use the bot
- Nice to have send UI link
- Nice to have Delete admin only

logo

Login Page

E-mail:

email@email.com

Login

logo

* Group & user are DDL

logout

Group:

Group name

user:

Username

Date filters: 7 days

30 days

6 month

all

*Admin user can see all groups

All User1 user2 ...

Category 1

הוצאות לפי משתמשים

Chart Title

■ Series 1 ■ Series 2 ■ Series 3

Category 3

Category 2

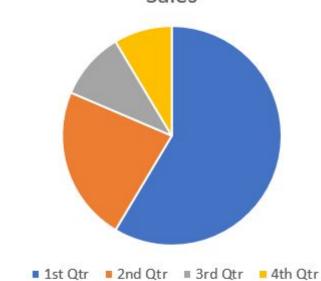
Category 4

הוצאות לפי קטגוריות - כללי

Sales

Total expenses:

10,256



logo

* Group & user are DDL

logout

Group:

Group name

user:

Username

All

User1

user2

Date filters: 7 days

30 days

6 month

all

הוצאות לפי משתמשים

Chart Title Category 2 Category 3 Category 1 Category 4 ■ Series 1 ■ Series 2 ■ Series 3

הוצאות לפי קטגוריות - כללי

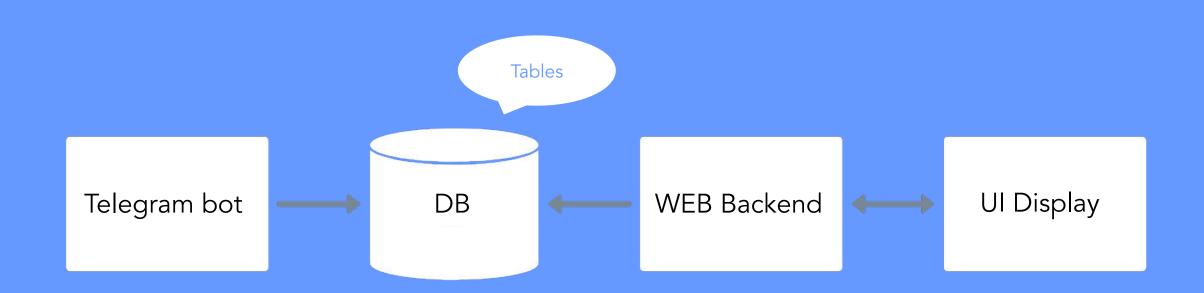
Sales

■ 1st Qtr ■ 2nd Qtr ■ 3rd Qtr ■ 4th Qtr

Total expenses:

2,564

ARCHITECTURE DESIGN



DATA BASE STRUCTURE



Users

- •pk_id (pk)
- •user_name
- •email
- date_created
- •is_admin

Groups

- •pk_id (pk)
- •group_name
- date_created

UserGroups

- •pk_id (pk)
- •fk_user_id(fk)
- •fk_group_id(fk) date_created
- •is_admin

ProductCategories

- •pk_id (pk)
- •product_name
- •category_name

UserProducts

- •pk_id (pk)
- •pk_id(pk),
 fk_group_id(fk)
- •fk_user_id(fk)
- •fk_product_id(fk)
- •category_name
- •amount
- date_created

TIMELINE



Feasibility study POC presentation

Complete DB manipulation Add graphs to UI

Finish must have features **ALFA** presentation

Stop development on nice to have features Features and start integration









MARKET RESEARCH

Bank Apps

Keep track of your expenses only

Other Apps

"Splitwise", "Expense Manager", "Wallet", "Monefy", "Fast budget"

Our App - MoneyMate

Our project is inside the messaging app, no need for an external app, you just add the expenses to the chat group, and it's recorded.

User friendly – it's perfect for any kind of user

EFFICIENCY





The app is effective with a small user base



If many users
use the bot
simultaneously
it may slow
down



Scaling the system architecture for better performance is possible

AGENDA



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