Team Software Engineering Competition

Participants	3
Workstations	1
Value	6%
Duration	3 hours

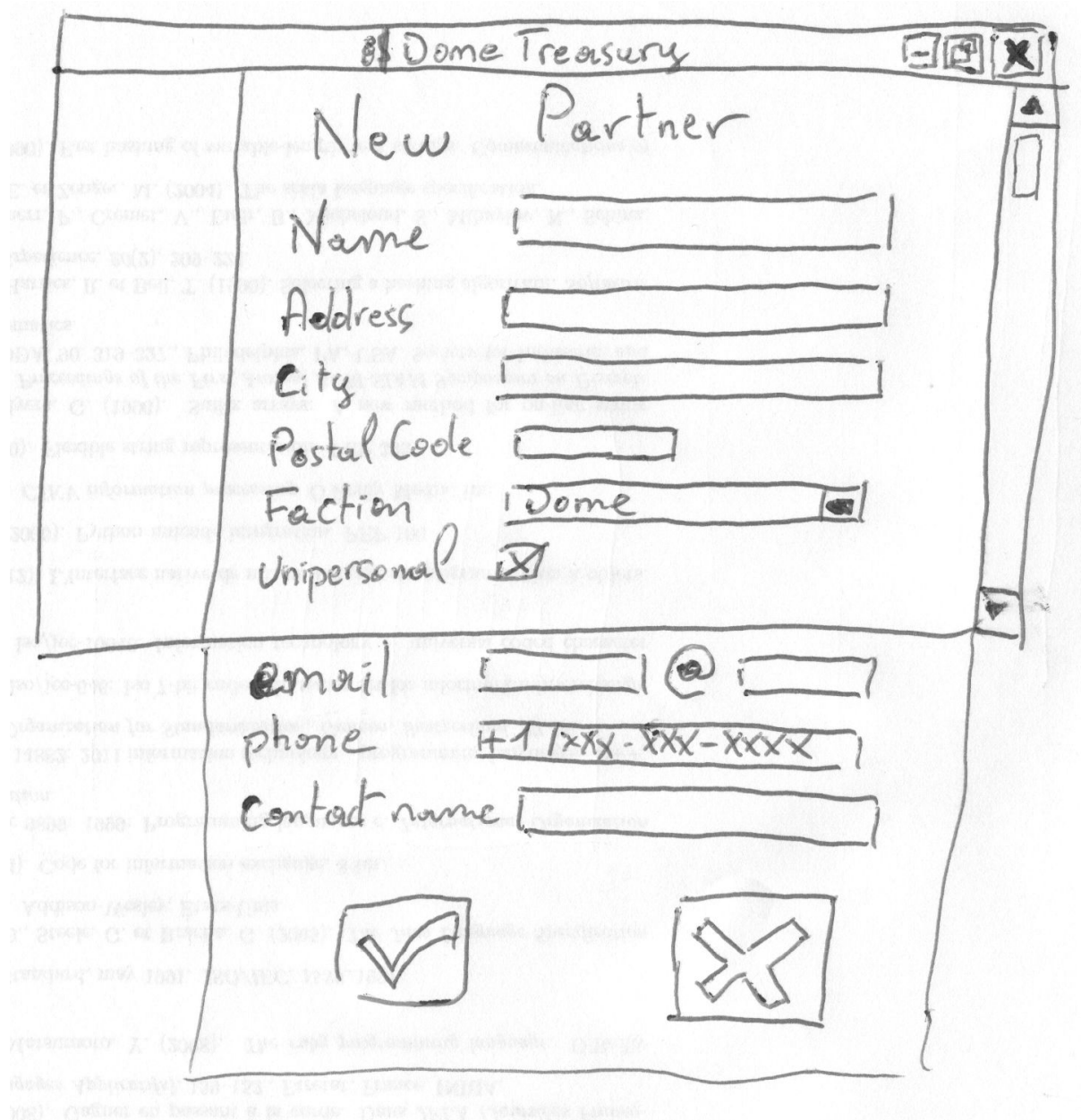# Dome Accounting Application - Specification

Partners

Every transaction of the Dome is concluded with partners, regardless if it is a debit or a credit. Therefore, we need a simple and efficient interface for adding new partners to the accounting application.

The important informations about a partner are as follows:
- Name
- Address
- City
- Postal Code
- Faction
- Unipersonal – flag set to false if the partner is a Dome-approved company, false if it is an individual
- Email address
- Telephone number
- Contact name – For a unipersonal, it should automatically be set to the name of the partner.

We encourage the development team to add such a functionality as a from to ease the work of the Dome's ~~accountants~~ secretaries.

Here's a mockup form made by our advanced UX team, which you must take as a model to craft said form:

Sketch of a "Dome Treasury" window — "New Partner" form with fields: Name, Address, City, Postal Code, Faction (Dome dropdown), Unipersonal (checkbox), email ([ ] @ [ ]), phone (+1 /xxx-xxx-xxxx), Contact name, and confirm (✓) / cancel (✗) buttons.

Factions

A partner's faction is a key information when we need to do business with someone else.

Since the Dome is an autosufficient society, we always prefer to take care of our problems internally, except when it cannot be done due to REDACTED.

Factions being a continuously modifying force, ~~accountants~~ secretaries need to add or modify factions efficiently to ensure the viability of the application.

As such, a form supporting this must be included within the application.

Transactions

The core part of the application is of course, the support of transactions.

According to the Dome lexicon: **a transaction is a financial movement or a promise of movement between to moral or physical parties**.
There are two types of transactions: debits and credits.

Each transaction is done between the Dome and a third-party.
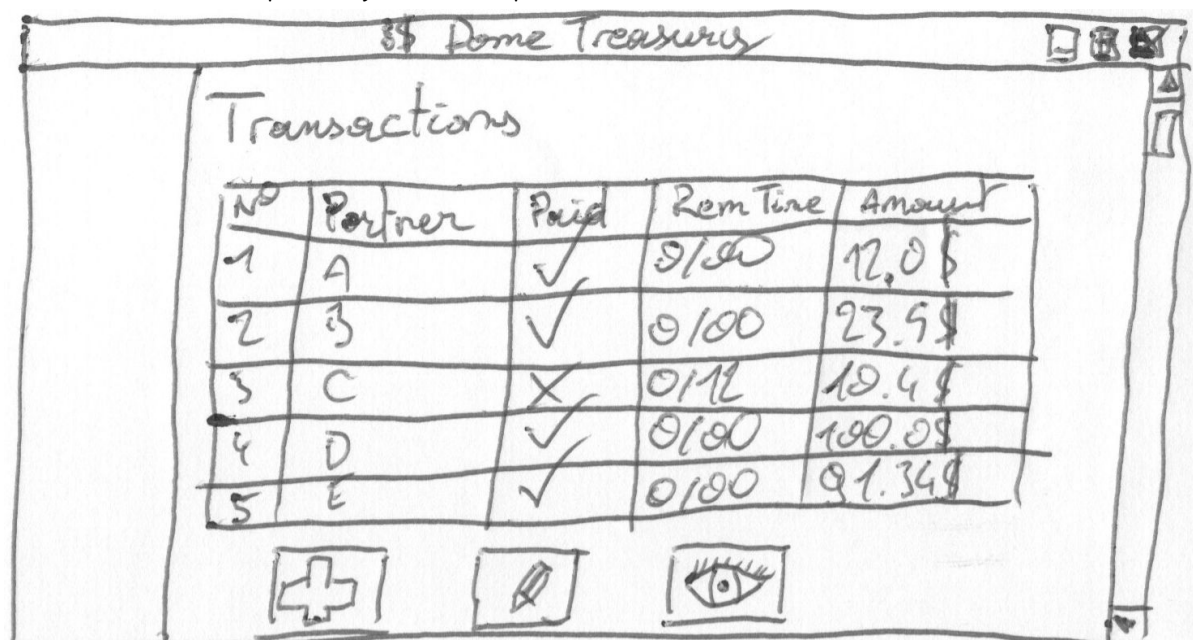The informations needed when adding a transaction are as follows:
- Transaction number
- Transaction type: Alimentary, Technological, etc.
- Partner
- Amount: **+** if credit, **–** if debit
- Date
- Due date
- Comments (if need be)
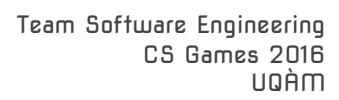- Paid: flag describing whether the transaction has been paid or not.

The application is centered around these elements, as such, several views must be implemented around transactions, depending on what is to be done with these:
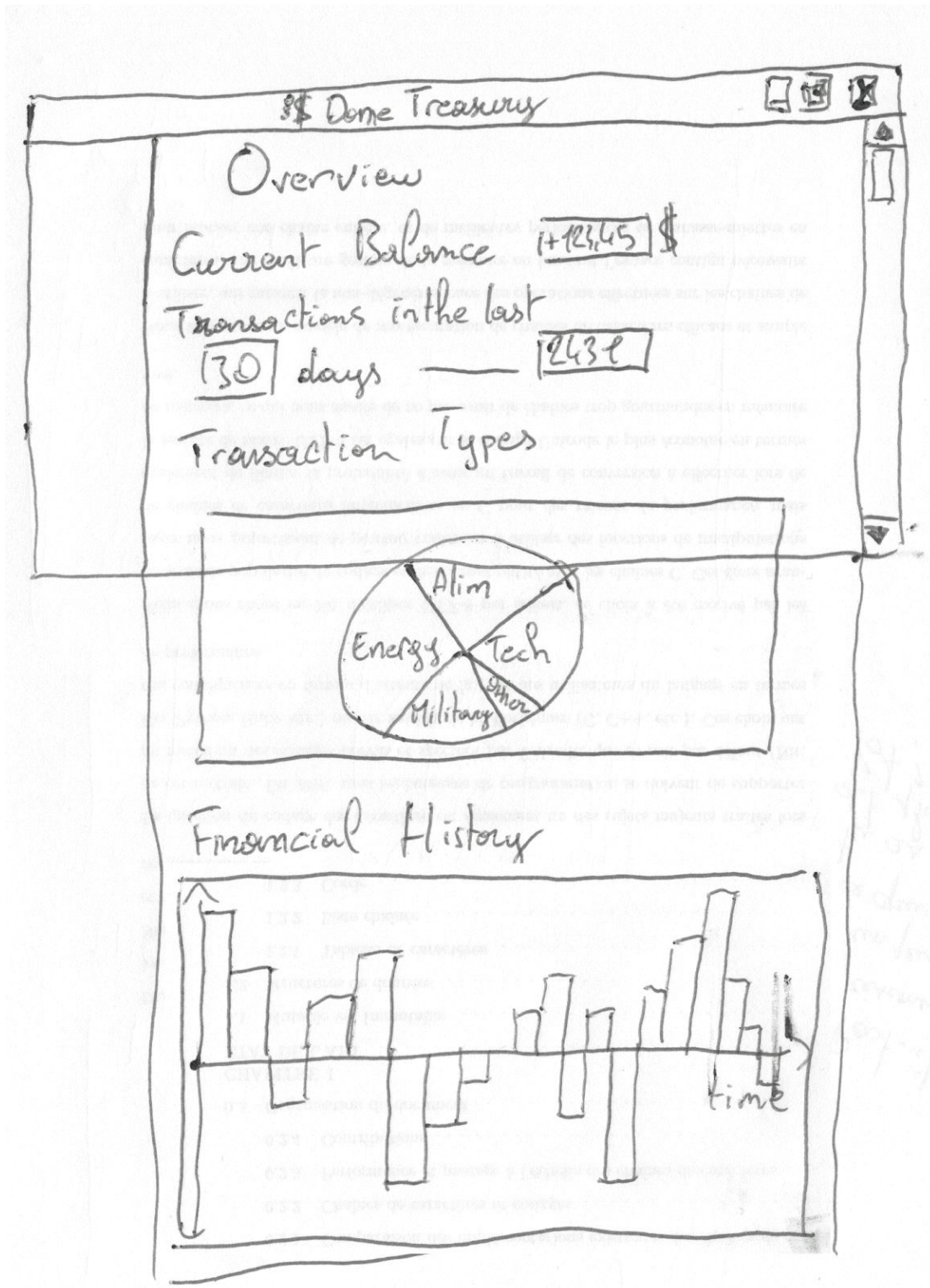- Add/Modify a transaction
- View a transaction
- Balance
- Overview

For the balance and overview windows, the Emperor requires the support of graphical visualizations to better understand the financial situation of the Dome.

Here are some mockups that you must implement:

New Transaction

Partner [A ▾]

Amount [$12.34] $

Due Date [YYYY/MM/DD] [▦]

Paid ☒

Type [Alimentaire ▾]

☑   ☒

$$ Dome Treasury

Overview

Current Balance [+123.45] $

Transactions in the last [30] days ———— [243€]

Transaction Types

Financial History

Dome Treasury

Bilan

From [YYYY / MM / DD] 🗓 To [YYYY / MM / DD] 🗓

Total in   [+1234,56] $
Total out [-1234,56] $
Balance   [+/-123,45] $

Transaction List

N°	Partner	Paid	Rem Time	Amount
1	A	✓	0/00	12,0 $
2	B	✓	0/00	23,5 $
3	C	✗	0/12	10,4 $
4	D	✓	0/00	100,0 $

History