POLITECNICO
MILANO 1863

TrackMe
Software Engineering 2 Project
DD Document

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2.1 Overview: High-level

The system is going to be implemented with a three tier architecture. Tiers are as briefly described by the following schemas.

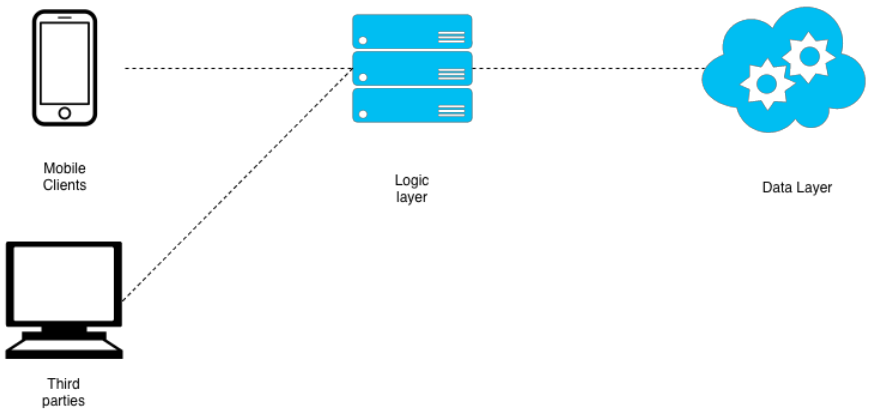

Figure 1: High level view of the system's architecture

The decision of this kind of architecture has been taken in order to build the system in the most modular possibile way:

- *Mobile clients*: users will be given with a iOS application which will be a view of the entire system.
- *Third parties*: third parties will be given with a light web interfaces to register/manage API access and they will be authorised to communicate with the system.

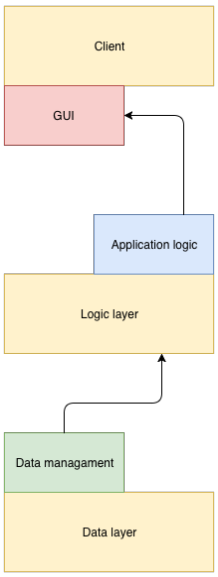

Figure 2: Distribution of application's function among the tier

- *Logic layer*: logic layer will implement all the logic of the entire system, it will be host on premises machine.
- *Data layer*: data layer will be implemented in third party's cloud system.

The idea is to keep as separate as possibile the logic layer from the data layer in order to let the system grow in a modular fashion and let us change cloud data provider as the system's dimension grow with the minimum effort.

2.2 Component view

2.3 Deployment view

2.4 Runtime view

2.5 Component interfaces

2.5.1 API structure

All the api system will be implemented referring to a single endpoint www.data4help.cloud. Users' applications and third parties will refer to different subdomain:

- *www.data4help.cloud/api/users* will be the specific endpoint for the application that serves users.
- *www.data4help.cloud/api/thirdparties* will be the specific endpoint for third-parties.