Kilo Medical Center Workers’ Application

# SCOPE

## 1.1 Our Client

Our client Kilo Hospital hereafter referred to as the client is located in Trilakatu 5, Espoo. It has a staff strength of over 152 employees amongst whom are surgeons, general practitioners, paramedics and auxiliary staff. The premises is a multi-storey building with four floors. Besides, some professionals are on call at times in other clinics with their patients.

## 1.2 The Issue

There is an increasing need to make available a common medium or platform for communication as the organization has deemed it necessary following observations and findings from a panel set up to look into productivity of workers and possible inhibiting factors mitigating against the employee’s success. Key problems itemized include:

* Untimely delivering of information
* Lack of common platform to pass information to colleagues
* Infiltration of social media with many professionals shying away
* Absence of dedicated platform for reaching fellow colleagues
* Seamless communication

## 1.3 Target Audience

Our market from the foregoing will be the staff members of Kilo Hospital therapeutic ward. These include

* Doctors
* Nurses
* Orderlies

# Analysis

## 2.1 PEST Analysis

From our PEST analysis of your organization we are confident with a stable political and economic environment, Kilo health center will be further ahead in taking its pride of place in the health industry. Though there a couple of concerns from the social perspective, we however, see it easing off on the long run. Besides, our research supports the committee’s finding as dedicated technology will help ameliorate your plight. Again, technology is gradually finding its place in almost every object imaginable with the internet of things (IoT). On the technology side we may anticipate security issues hence adequate preparations on securing it.

## 2.2 Our Solution

## 2.2.1 Application Features

Our company, after careful and detailed analysis of your situation and considering prevailing circumstances proffer a medical application dedicated to the employees of your organization Kilo Health Center. The key features of the application shall include

* Seamless communication
* Closed user group
* Redundancy
* Scalability
* Confidentiality
* Quarterly maintenance for first four years

Besides, we offer to work closely with your designated employees as part of our steering group.

## 2.2.2 User Personas

We shall provide three dedicated user personas which will be reflected in the user interface of each user personal. Categories shall include

* Doctors e.g. surgeons
* Professionals e.g. General Practitioners and nurses as they work closely
* Basic platform for other members of staff e.g. orderlies

This we believe will help confer further security while providing a medium for seamless reach for all concerned.

## Guarantee

The project Kilo Medical Application shall be completed four weeks from the date the contract is formally sealed. Our proffered product will incorporate all the key features listed in section 2.2 above under solution. The medical application will significantly enhance productivity of employees and create value for services and utility for your valued patients.

## 3 Budget & Schedule

## 3.1 Budget Details

The project would require 1600 man-hours. The average unit cost per hour for the every member of the project team is calculate at net value less taxes. The cost of executing the contract is as detailed in the budget table below.

## 3.2 Budget Table

|  |  |  |  |
| --- | --- | --- | --- |
| Services/Machinery | Unit Cost(Euros) | Quantity | Amount |
| IT infrastructure | 1 | 4000.00 | 4000.00 |
| Transport | 1 | 2500 | 2500.00 |
| Security | 1 | 4000.00 | 4000.00 |
| Manpower | 1600 | 22.00 | 35200.00 |
| Taxes\* | 1 | 5,280.00 | 5280.00 |
| Redundancy | 1 | 1300 | 1300.00 |
| Grand Total |  |  | 52,280.00 |

## 4. Technical description and requirements

## 4.1 Requirements

Develop and implement small real time chat application for hospital needs. Application must include:

a) Real time message and media delivery

b) Safety e.g registration and login procedures

c) Content persistency

d) Usable UI

e) Ability to be developed further

Overall time frame: 3 weeks

Application must be suitable for any device like phone, tablet, PC

## 4.2 Description

## 4.2.1 Team structure

|  |  |
| --- | --- |
| Aleksey Lebedev | Project manager and coordinator |
| Kirill Kazantsev | Back-end developer |
| Darlington Omoifo | Front-end developer |

## Stack and tools

1. Java on back-end(NetBeans IDE)
2. Apache( or Glassfish) web server
3. Standard front-end set(HTML5, CSS3, JS)
4. Git server for version control and code management among team members. Possible auto-deployment on VPS to be able to check results on production
5. Trello as task management system

## Milestones and versions

|  |  |  |
| --- | --- | --- |
| Version | Description | Estimated time(days) |
| v 0.1 | Simple real time chat without any additional functionality | 1 |
| v 0.2 | Basic registration/login implementation | 1 |
| v 0.2.1 | Defining user role on the registration step | 1 |
| v 0.2.2 | Implementing “friends” functionality e.g search among other people, ability to add/remove friends | 2 |
| v 0.3 | Private ono-to-one chat rooms | 2 |
| v 0.4 | Implementing GLOBAL public chat rooms, special for every type of user, where only allowed TYPES of users will be able to chat | 4 |
| v 0.5 | Implementing media sharing | 4 |
| v 0.6 | Sending to specified group of users e.g nurses | 1 |
| v 0.7 | Implementing emergency messages.  Special kind of message with predefined form which will be visible in recipient cabinet under separate tab | 2 |
| v 0.8 | Complain about someone to manager. | 2 |
| v 0.9 | Implementing messages history | 2 |
| v 1.0 | Assignment type of messages e.g from doctor to nurse to do some medical things with specific patient | 2 |
| v 1.1 | Final documentation & refactoring | 2 |

\*NOTICE\* There might be more “3-digits” versions if development process will require so.

## Development steps

1. Considering global perspectives such as: code style, tools versions, setting up local and production environments
2. Actual development. Every week (or more often) there will be team meetings with further planning and code review/refactor: ing
3. Final testing
4. Demo
5. Production

# 5. Conclusion

I hereby, on behalf of the chief executive officer of Datum Oy Finland, affirm that the terms and conditions of this contract proposal are correct and accurate. We commit to fulfilling all the stated features in Kilo Medical Center workers Application and within the stipulated time frame of four calendar weeks calculated from the date of sealing the contract.

We also affirm that help professionals as designated by Kilo Medical center will be available for process testing and at various phases of the development of the application. However, their role will be monitoring as to suitability of purpose. Besides, we consent to a penalty fee of not more than five percentage (5%) should the project extrapolate the stipulated time limit with a maximum of five (5) working days.

I remain,

Sincerely,

Datum Oy Finland

Lebedev Aleksey