**Employees management system**

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# Background description

Communication is a major factor of success in many industries around the world according to a statistic found in "**What are all the benefits of a time and attendance system? - Quora. 2019. What are all the benefits of a time and attendance system? - Quora. [ONLINE] Available at: https:// www.quora.com/What-are-all-the-benefits-of-a-time-and-attendancesystem. [ Accessed 11 Aug. 2019].”** all of companies around the world use some form of communication, as it provides the different departments with relative information. In modern days all kinds of data are precious and is being stored however the data that this project will be focusing on is strongly involved in the organization process of the company in question.

Efficiency and quality are the main two keys to be successful company, typically it is achieved by having employees with a clear working schedule present in the office. However how can an employee have a schedule without long meetings with its supervisors and how can anyone tell that employees are there aside from evidence of the work that they have done throughout the day?

Vikar is a Danish-owned agency with more than 25 years of experience in the temporary agency industry. It provides temporary solution and selects staff for many customers throughout Denmark. The workers numbers grows every month and their employees management system starts to decay. They keeps getting more and more complains about system errors, that is why they entrusted our group to develop a new attendance system with schedule.

The problem with the previous system is that employees kept experiencing difficulties checking, some of the employees started to abuse this system by stating that they worked but could not check in. It became very hard to some changes or updates to the program because the code is not flexible, easily breaks. we offered them employee management system solution based on our research on the web such as "**The Best Time and Attendance Systems of 2019. 2019. The Best Time and Attendance Systems of 2019. [ONLINE] Available at: https:// www.businessnewsdaily.com/6730-best-time-and-attendancesystems.html. [Accessed 11 Aug. 2019]**”, **“*Top 10 Employee Management Tools*. [online] Available at: https://connecteam.com/top-10-employee-management-tools/ [Accessed 11 Aug. 2019]”.** site offers, but in simpler and customized way.

Companies tend to keep their mangement systems private, however there is similar software such as “Envoy” and “Vizito” which does not handle the check in/out for the internal employees but rather the checking in and out of guests/ visitors. Such systems are usually cloud based and use an iOS or Android tablet for registration in combination with a website for configuration and reporting.

Such system would not be enough in this case as it takes new credentials for each guest/visitor instead of keeping track of the already existing employees.

# Definition of purpose

The main purpose why Vikar agency needs employee management system is to track efficiency of workers, make employees work more efficient, also collect data for later use, such us for better payment management at the end of the month.

# Problem Statement

When we focus our self on the company, the requirements and key points, we can see some of problems, to discuss and later solve with solutions.

1. How can we make a system to track attendance of employees?
   1. How to make a system understandable?
   2. How can we make system efficient and how to implement visualization of the data?
   3. How can we make a system secure?
2. How can we make a system with working schedule?
   1. How to make a system understandable?
   2. How can we make system efficient and how to implement visualization of the data?

# Delimitation

* Application will be for computers exclusively.
* Application will not be browser based.
* The system will only be accessible through a local wireless connection.

# Choice of models and methods

The method that is to be followed for this project is SCRUM. The group is to stick to its framework as much as possible. With Balkis Ibrahim and Dziugas Austys are appointed SCRUM Master and Product owner, respectively. Other participants of the Scrum team are Przemysław Regulskyand Ronald Johnson.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **What** | **Why** | **Which** | **Which** | **Who** | **Hours** |
| **How to make system understanda ble?** | login must be fast and easy way for employees, it can effect fluency of company | Milestones will be: fast, clear, self-explanatory and will avoid user from mistakes | Use JAVA Fx as a tool for building graphical interface | Ronald /  Dziugas | 100 |
| **How can we make system efficient and how to implement visualization n of the data?** | to provide useful customized solution for managers to check workers | software on the both side is easy to use and easy to understand | Core of this step use SQL and collaboration with JAVA, represented with Fx interface tools | Balkis / Przemysław | 50 |
| **How can we make system secure?** | to secure personal data, and provide reliable system | system will be covered with hardware delimitations as well as police of Java RMI will be used | Main tool is  JAVA, mainly RMI structure will be used | Przemysław | 50 |

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# Time schedule

The minor meetings are management focused, aiming to keep track of the overall progress of the project as well as dividing up the work into individual tasks. It is also during this time that the group discusses how further development is to ensue. The major meetings are orientated around practical tasks and with greater time delegated to them. They will facilitate collaborative work on certain aspects, and an opportunity for members to request assistance if they are struggling with their individual task.

Deadlines will be created by scrum structure with the end in June 7th which is our release day and deadline for upload of our project.

|  |  |  |  |
| --- | --- | --- | --- |
| **Milestones** | **Date** | **Goals** | **Note** |
| Project proposal | 30. jun |  |  |
| Deadline: Project description | 6. jul |  |  |
| Sprint #1 | 7. jul | Sprint planning and division of tasks |  |
| Sprint #2 | 14. jul | Research and design of diagrams | End of Sprint #1 |
| Sprint #3 | 21. jul | Server/Client implementation | End of Sprint #2 |
| Sprint #4 | 28. jul | Main functionality implementation | End of Sprint #3 |
| Sprint #5 | 4. aug | GUI Creation and implementation | End of Sprint #4  Sprint #5 ends on August 11th |
| Final deadline | 16. aug | Hand-in before 12 noon |  |

From the point of the First sprint to Final deadline we will follow pattern of 3-day meetings for each sprint in 7 sprints at all (Final deadline). After every day meeting will be updated burn-down chart and log if task resources changed.

# Risk assessment

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Risks** | **Description** | **Likelihood**  Scale: 1-5 5 = high risk | **Severity**  Scale: 1-5 5 = high risk | **Identifiers** |
| Being late on schedule ( Poor time management) | Running out of time before hand in | 4 | 5+ | Approaching deadlines with too  much work to be done |
| Lack of technical understanding | Being unable to move forward with the project because of lack in knowledge | 3 | 5 | No member in the group being able to code part of the project or to find a  solution to a problem |
| Unforeseen illness | A group member falls ill | 5 | 3 – 5 depending on illness | Absent member |
| Unexpected changes | Client wants to change important part close to deadline | 3 | 4 | The client has repeatedly made many comments |

# Sources of Information

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**Appendices**