SKILL TRACKER SYSTEM FOR EMPLOYEES

Background - A telecommunications company that deals with the installation and troubleshooting of enterprise data and voice networks.

Problem – bad job management. Human resources are not allocated efficiently, resulting in loss of productivity. In turn, work is rushed, as deadlines get closer.

Solution –Allocate human resources better. Put technicians that are more skilled on bigger or more urgent jobs and weaker technicians on the smaller, less urgent ones.

Each technician’s skills should be recorded and tracked as time goes on. A system could be developed to do this.

System Requirements:

* Store personal data of multiple technicians.
* Login function to restrict access to technicians.
* Edit personal data of technicians.

Rating/Scoring mechanism. A number rating is given to each skill of a technician.

* not in current scope but could be added in the future - Rating of the skill is dependent on criteria such as neatness, speed, chance of error, etc.

The goal of the system is to

* reduce time and productivity lost by allocating the most suitable technicians for jobs. In addition,
* realistic time estimates could be given for job completion.

In the past, the head technician would give a two-hour estimate for a job that would end up taking 7 hours instead.

It is also to motivate technicians to meet high scores on their skills so that they could be deemed suitable for a wider range of jobs.

Intended users – head technician, general manager

Functions each user will have access to –

Technicians –view performance, comment function, view profile/personal data, view performance by project, view performance of other technicians, comment on the performance of other technicians

Head tech, manager – delete technician profiles, edit tech profiles, edit tech scores, comment, delete comments, view technician scores in various skills and sort by highest to lowest, view technician profiles, view technician scores, view technician performance by project, add project, add project duration

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| --- | --- | --- |
| User | Function | |
| Manager | * Register technician * Delete a technician personal data * Delete a technician skill data * Update a technician personal data * Update a technician skill data * Login * Logout * Post comments * Delete comments * View comments * Assign an overall rating to technician * View technicians by overall rating (e.g. on a scale of 1-10, view technicians with a rating of 8-10 or 1-3) * Upload Project Profile and Information * View Project Profile * Edit Project Profile * Delete Project Profile * Sort Projects by date and status (status would be completed, ongoing, etc.) * Assign technician to project * Remove technician from project * Search for technician by name * Search for technician by ID |
| Lead Technician | * Register technician * Delete a technician personal data * Delete a technician skill data * Update a technician personal data * Update a technician skill data * Login * Logout * View Project Profile * Search for technician by name * Search for technician by ID * Post comments * Delete comments * View comments * Assign an overall rating to technician * Assign technician to project   • Remove technician from project   * View technicians by overall rating (e.g. on a scale of 1-10, view technicians with a rating of 8-10 or 1-3) |
| Technician | * Login * Logout * Post comments * View comments * View technicians by overall rating (e.g. on a scale of 1-10, view technicians with an overall rating of 8-10 or 1-3) * View technicians * View Project Profile * Search for technician by name * Search for technician by ID |

Technologies:

* php
* html
* css
* js
* MySQL

|  |  |
| --- | --- |
| User | Function |
| Manager | • Register technician  • Delete a technician personal data  • Delete a technician skill data  • Update a technician personal data  • Update a technician skill data  • Login  • Logout  • Post comments  • Delete comments  • View comments  • Assign an overall rating to technician  • View technicians by overall rating (e.g. on a scale of 1- 10, view technicians with a rating of 8-10 or 1-3) |

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How the problem was arrived at?

* Interviewed the lead technician.
* Questions were asked about the projects the company was currently undertaking and the performance of the employees on such projects. At the end of the interview session, it was clear that the performance of the employees was not meeting the expectations of the lead tech and jobs were not being completed by the set deadlines. The company’s reputation is at stake and its chances of both repeat and new business.
* This is the reason for the undertaking of this project. This project will be a web application to measure employees’ skills. With this app, the lead tech would be able to:
  + view employees’ performance over a period
  + **Zero in on weaker employees. Training or other action could be taken to improve their skill level.**
  + **Zero in on the stronger employees. Stronger employees could be allocated to complete larger or more urgent projects.**
  + Reward stronger employees for their work to encourage growth and higher quality work
  + More competent workforce
  + Less wasted time and resource – sometimes too many employees may be allocated to one site because the lead tech is uncertain of how many employees could get the job done. If the lead tech knows the skill levels of each worker, he could increase productivity by sending a sufficient number of workers to sites.

RESEARCH OF SIMILAR APPLICATIONS:

* Liaison Skill Tracker:



Features:

* Skills Database
* employee profiles
* awards, quests,
* leaderboards
* Employee Skills Spreadsheet - This is only viewable by admins, and allows them to see

all of the skills of their employees within their department

* Skills Database - database that tracks the skills of employees which is used for

evaluation purposes and to learn what types of training needs to provided.

* Employee Profiles - A profile based system that employees can look up other employees.

Requirements

Functional Requirements

* Add Employee
* Delete Employee
* Edit Employee
* Add Skill
* Delete Skill
* Find Employee
* View Employee Information

Non-Functional Requirements

* Leaderboards
* Achievements
* Single Sign-on
* Give Admin
* Remove Admin

TrackStar Skills Tracking System

Features:

* Gap reporting for training and employee development purposes
* Skills can be organized into groups
* Compare Employees’ skills side by side to view differences
* Search tool – search for employees by skill, skill level, location, departments, availability, keywords from resumes,
* Manage Employee schedules and place them on projects.
* Reports and Report writer
* Skills Dashboard
  + View number of jobs requiring a certain skill
  + View number of people with that skill
  + View skill level of individuals with skill(Proficient, Some Experience, Expert)

ABC Employee Skill Tracker

Features:

* View number of employees possessing each skill (dashboard, pie chart) -admin
* View each employee’s skill level in each skill (dashboard, bar chart)-admin
* View Employee information in a table -admin
* View Employee information profile –admin, employee
* View table showing employee skills, skill level in each skill. The user can increase or decrease the user’s skill level in the particular skill, change the name of the skill, change the details of the skill or delete the skill.
* Overall avg skill level in all skills
* Add employee
* Add skill
* Edit Employee personal information
* Search employees by name and view employee personal data as well as skill data

