SKILLNET

A Real-time, Insightful Employee Skill Data Visualization

SkillNet

CELESTIAL SYSTEMS

Overview

In today's era of Big Data, data visualization is a critical tool for solving "analysis paralysis" in our hyper-competitive business world. Assessing and analysing data graphically cuts down the time spent in recognizing many correlated parameters and patterns that were not visible before, but are still influencing your business. Visualization transforms your data into actionable intelligence for you to make informed decisions.

Our Client

The most important asset any organization has is its people. SkillNet provides a platform to measure skills and power upskilling programs for a wide range of enterprises across the globe. SkillNet configures detailed skill assessments to provide a talent inventory that displays individual and organizational capabilities and gaps. This data is generally not available in HR platforms so most firms trying to build a skill database typically use Microsoft Excel. SkillNet goes further to automate personal development plans using the assessment data. This approach improves employee performance and engagement.

Business Requirements

- SkillNet was asked to expand data visualization for a large client of theirs, seeking to analyze staff capabilities and remove manager bias
- Build a real time graphical visualization of employee skillset data to organize upskilling programs
- A benchmarking tool based on various assessment filters to normalize data across managers, regions, and business units
- Integrating these capabilities to leverage the data they were already collecting

Celestial Solution

Celestial's enterprise solution to meet the above requirements was built on Lattice, our in-house ReactJS framework. The use of the Lattice ReactJS framework allowed us to meet the "end requirement" of SkillNet - enhance their current tool to create a standard platform to evaluate over 200 employees being evaluated on 300 skillsets. Furthermore, the platform we built can be plugged in to their existing system. The critical data visualization component was designed using FusionCharts which consumes the employees' data and ratings, and then generates customizable graphic outputs for the same. Advanced and intuitive filters were developed with the intention of helping users make employee assessments and develop targeted up-skill programs. The data visualization viewer can also filter results based on the designation of employee role, respective managers, and location of work – as well as being able to make comparisons across all of these parameters.

Assessment Filter

This feature provides options for both self-assessment and for the managers to evaluate their team

User Filter

Allows selection of the user types – users belonging to different roles/teams/categories/locations

Skill Filter

Facilitates filtering based on skills ratings and assessments

> *“SkillNet helps organizations measure skills and build a talent inventory, the first step to upskilling programs. This is a significant problem in many global companies. The FusionCharts-Celestial partnership helps us better visualize the skill data so we can target upskilling programs with personalized employee development programs for our customers.”*
>
> - Mike Kritzman, SkillNet Founder and CEO

The Development Phase

The biggest challenge during project development was the required high level of flexibility for both filtering and data visualization. To meet this demanding requirement, we developed an on-the-fly dynamic filter which changes the dependent filter data and result data simultaneously. Keeping in mind the tool had to handle 300 different skills and an initial set of 200 people, as well as function with a high level of timely dynamicity without compromising on performance, we used React to develop the frontend and FusionCharts for graph development.

We divided the project into three phases:

1. Data upload, parsing and storage inside the MySQL DB for the admin user
2. Implementation of the flexible dynamic filters
3. Data evaluation and graph generation

The application was initially hosted on our native servers to facilitate beta level testing by the client and to validate the requirements implemented. The finished, tested and accepted product is now hosted on SkillNet’s Azure ecosystem.

Technologies Used

Frontend

React

LATTICE JS

FusionCharts
An Idera, Inc. Company

Backend

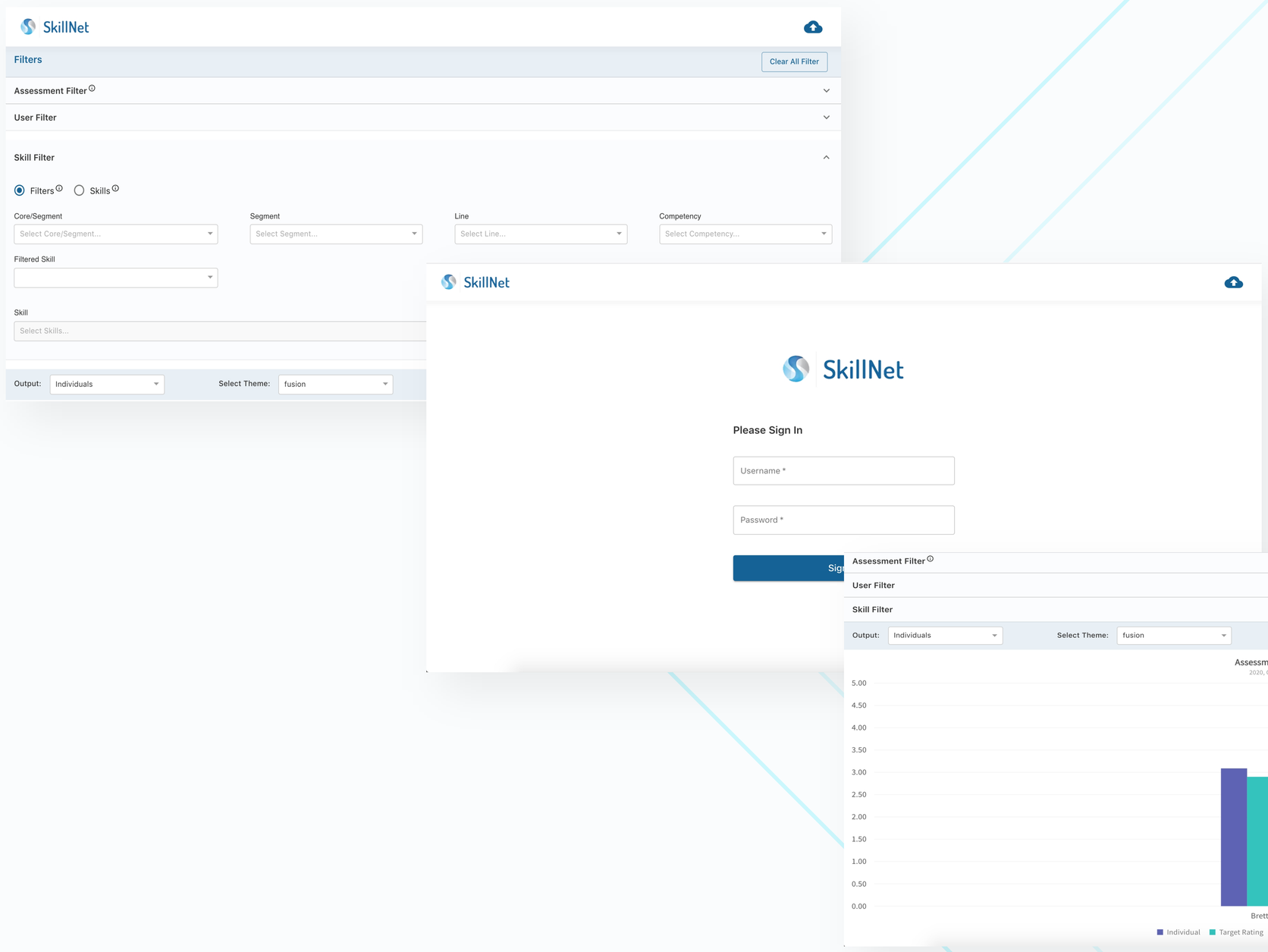
node
express

Database

MySQL

In Short

- 80% enhanced employee performance for SkillNet clients
- 80% increased efficiency of employee upskilling programs
- 70% improvement in data analysis
- 80% increase in overall business proficiency for SkillNet
- Easy integration to existing tools
- Generic platform for graphical comparison of efficiency



CELESTIAL SYSTEMS