

INTELLIFY - WINTER INTERNSHIP

Final Report

Work Details

- Name - Prakhar Ganesh
- Entry Number - 2015CS10245
- Name of Organization - Intellify
- Place of work - IIT Delhi
- Duration of the internship (In Days) - 22
- Start Date - 08-12-2018
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Summary

Intellify is an education initiative set up by students and alumni of IIT Delhi with the aim to solve the problems plaguing the Indian Education System. Intellify organised 'International Science and Creativity Olympiad' for students from class 3rd to 12th. I studied the data that we got from the first stage of the olympiad to create personalised reports for every school which participated in this olympiad. These reports help the schools identify the topics in which their students did not perform well, how much variation is present between their top scorer and their average score, and where do they stand with respect to the other schools participating in the olympiad.

Intellify is also working on a 'student learning portal' initiative. As a part of that initiative, they plan to create a quizzing portal that adapts to the needs of the person who is taking the quiz. This way, each student can learn at their own pace and focus of topics in which they require more practise. I built a recommendation system for Intellify, which recommends the questions that should be asked next, given the questions that have been asked till now and the student's response.

Indian Road Safety Campaign (IRSC), is a road safety initiative started by the students and alumni of IIT Delhi working towards the mission of making Indian Roads Safer. Both IRSC and Intellify are established by the same not for profit trust, 'Solve'. So for my field work, I worked as a coding mentor with IRSC, in the 'Toyota Hackathon on Road Safety' organised in collaboration with NSS IITD. The hackathon went on for over 2 days, with nearly 100 school students developing & presenting their digital solutions to promote road safety and reducing the frequency and effect of road accidents or for detecting frauds. There was a huge amount of creativity & innovation shown by the students, and the teams that were able to develop their ideas were also felicitated.

Task 1 -> Preparing Reports

The aim of the reports was to provide each school with a targeted analysis of the performance of their students. If the students from a school are falling behind in a particular category of questions, it can highlight certain skills that the school needs to focus on improving in its students. If the score variation across students from the same school is huge, it shows that proper attention is not provided to every student. Such targeted feedback can help the schools improve and can provide students with a better environment to grow. The report included the school's standing across all the schools, top performers of the school and a distribution of the scores of all the students from that school.

Task 2 -> Recommendation System

Every student learns at his/her own pace. Trying to create a single quiz that tests the abilities of every student is unfair to the students. The learning curve of the quiz might be too flat for one student and too steep for some other student. For some student, it may not contain enough questions from a topic which he/she needs to practise, while too many questions from a topic with which the student is immensely comfortable. So, I created a recommendation system that changes itself and asks questions based on how the student is performing up until now. Intellify plans to upload this recommendation system to their online quizzing portal, so that students can take these quizzes and hone their skills.

Task 3 -> Road Safety Hackathon

My work as a coding mentor in the Road Safety hackathon was to guide the students and help them develop their ideas. Most of the students were high school students and had very little experience with coding. I, and 2 other coding mentors, were present with the students for the whole course of the hackathon, solving their doubts and sometimes coding for them, so that they can create a product out of their idea.

Our first task was to get idea submissions from the students, evaluate them, check feasibility and provide feedback. Once the targets for every team were finalised, the students started working on their software/hardware for the final presentation and we were present with them to overcome whatever difficulties they faced in the way.

After an extensive 24-hour hackathon, we finally went to each team and saw their presentation. After evaluating all the presentations, we selected top 10 teams which were then given a chance to showcase their product in front of a jury and all the other participants. The top 3 teams selected by the jury were given cash prizes.

Engaging school students into creating solutions for Road safety problems gave a new perspective to the situation. We were able to analyse the issues from an altogether different angle, and there were a lot of really promising product ideas that came up during the hackathon. Also, while trying to research for their product, the students learned about the traffic rules and other protocols and there was a certain sense of awareness spread among the school students at such a young age.