

An Experience Report for AIW Case

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We presented the All Is Well Case Version 1¹ to 89 B.Tech (UG) 3rd year (2014 batch) students from Computer Science and Engineering (CSE) branch of Dr. B. R. Ambedkar National Institute of Technology (NIT), Jalandhar². 22 teams of four students each (with an exception of one five member team) were formed from a class of 89 students and the same case was allotted to each team. To enhance the honest participation of each student in a team, each student was asked to take the responsibility for one of the four case questions. However, the response to each question had to be finalized through team work. A set of three introductory lectures were conducted to enable students with the basic knowledge about CBL as well as specific SE concepts related to the case study presented. Each student team was given four days to work on the case and related questions. Each 4-member team was asked to submit a joint case response report carrying the responses for all four questions. Each team was then required to present their responses to the case questions. A targeted discussion over the responses to the questions, was carried out after each team presentation. To motivate the students this exercise was assigned a weight-age of 6 out of 10 assignment marks for the SE course. Along with marks benefits three Best Team Work awards and three Best Individual Awards were conferred to the selected students.

Empirical Analysis: We provided the students with a survey questionnaire targeted to identify whether they gained in various learning credentials including learning, critical thinking, engagement, communication skills, and team work. Each question has four options: Strongly Agree (SA), Agree (A), Disagree (D), and Strongly Disagree (SD); out of which a student could choose only one.

Outcome: Almost 74.53% students agreed to have achieved the all five learning principles of learning, critical thinking, engagement, communication skills and team work.

Recommendations: All the questions are related to the identification and discussion of the parameters to use when creating a common decision. I would "help" students by driving them toward some specific challenges to face, such as (i) the compromise between software quality and performance, (ii) the choice of the programming languages based on the probability to introduce defects and/or security vulnerability.

Challenges and Difficulties: We faced a number of challenges during the execution of this SE case-based learning exercise. Although three preparatory lecture sessions were conducted to introduce case-based learning to the students, it was observed that students found it difficult to switch from lecture-based learning to case-based learning. Another challenge is the decent conduct of presentations and discussions which required a day-long session. Also sustenance of interest among students during such long sessions is problematic. This study was conducted on 89 students; a large class size which hampers the conduct of discussions.

¹<http://seabed.in/case-study/Design-All-is-Well-Case.pdf>

²<http://www.nitj.ac.in/>

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Analysis and Summary of students' solutions: We are providing solutions from the 3 best teams.

These solutions are available at the following link:

<https://drive.google.com/file/d/0B033bsjbbZ3wdGRpVHplX1g5aEk/view?usp=sharing>