A Student Simulation of a Professional Software Development Group

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Abstract

The primary purpose of our Computer Systems Research project is to investigate the feasibility and consequences of establishing a student workgroup based on a classical development lifecycle model.



We modeled our project on the Waterfall Development Model, otherwise known as the Systems Development Lifecycle Model (SDLC). The Waterfall Development Model is a popular system of software and module development that focuses on a tiered or layered approach for writing and testing programs.

Process

All the major components of a typical business situation are present in our simulation, albeit in somewhat altered states. These are the development team itself, the team manager, the company administration and the clients. The students working on their research laboratories in this project group represent the development team. Mr. Strong represents the team manager. The school administration, including the department chairs and the guidance department represent the corporate administration and the client population in this situation is the general student body at Thomas Jefferson High School.

One of our team's primary goals is to understand and meet the demands set forth by the management on a timely manner. The management's directives towards our project group were usually vague requests for improvements on existing services provided by the school. More specifically, we were to design and build modules that could handle efficiently and electronically what had

previously been done in a difficult and cumbersome paper manner.

As with any professional software or module development community, our team had to work within the logistical, legal and financial constraints of the school and its clients. Expenses had to be kept minimal and usability was a high priority.

