Teaching Assistant Management System

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The VCU CS department’s undergraduate population is quickly expanding every year. As class sizes grow, student outcomes and retention rates depend on effective course management. Undergraduate teaching assistants (TAs) are a major resource in courses, but a management system is needed to most effectively utilize TAs and allow courses to function smoothly. The needs addressed by the system are a central method for TA recruitment and evaluation, guidelines for TA training and expectations, allowing easy selection of TAs for courses, and supervising TA grading for consistency and reliability. Our system consists of three components: a data storage system of TAs, courses, requirements, and assignments, a web interface containing the application to be a TA, course information, and methods for instructors to manage TAs for their courses, and lastly a centralized set of documentation for the duties and expectations of TAs and departmental policies regarding TAs. The goals of this system are to benefit faculty by easily delegating course workload to TAs and limiting effort to manage them, benefit TAs by clearly defining responsibilities and enabling ease communication, and to benefit the department by improving student outcomes with more oversight and maintaining long-term records of courses. This system is not limited to VCU CS and may be expanded to manage TAs and course information in other fields or in other universities. The main goal of this course management system is to ensure the best utilization of undergraduate TAs as a resource, but also to store course information in a long-term, digital format and eventually counteract the shortage of CS-educated professionals in industry by improving the scalability and quality of CS education.

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