# Abstract

Student Organization System (SOS) is a web-based system meant to provide leaders and administrators of organizations a way to manage members and events. Simultaneously, it allows users to monitor the events and organizations they belong to. This system is also very similar to existing student organization systems that are hosted and managed by Universities and Colleges. However, most of those systems are either offline, with a primarily focus on management, or they are manual. Despite of the fact that the SOS is primarily developed for academic purposes, it also facilitates member and organization interactions. The SOS is developed using the Unified Software Development Process (USDP), the two first sections of which are contained in this document. The specifications of the system are captured in the form of Use Cases, forming the Use Case model of the USDP. Finally, these Use Cases are used to develop the Analysis model. This is done in the form of Unified Modeling Language diagrams, which describes both static, in the form of Class and Object diagrams, and dynamic, in the form of Sequence Diagrams, views of the system. The SOS is primarily implemented using a Three-Tier (3TA) Software Architecture and also repository architecture as the secondary design architecture. Multiple design patterns are used in order to help the system design as well as efficiency of the system. Mentioned patterns are including Singleton, Command, Façade, and Builder patterns.