

CALSTRS

Learn how Mentis is helping in designing and implementing
Test Automation strategy for improved business results.

About Our Client



The California State Teachers' Retirement System (CalSTRS), with a portfolio valued at approximately \$310.9 billion as of July 31, 2021, is the largest educator-only pension fund in the world.

CalSTRS administers a hybrid retirement system, consisting of traditional defined benefit, cash balance and voluntary defined contribution plans. CalSTRS also provides disability and survivor benefits. CalSTRS serves California's 949,000 public school educators and their families from the state's 1,700 school districts, county offices of education and community college districts. CalSTRS operates under sections of the California Education Code known as the Teachers' Retirement Law, which established the State Teachers' Retirement Plan with CalSTRS as the administrator.

Business Need

CalSTRS needed a team of Test Analysts with knowledge and experience with documentation of testing methodologies and management for a pension, financial or similar system.

The Senior Test Analysts will perform various test activities related to the current Pension Solution project to implement a new pension administration system. The Senior Test Analysts will be responsible for supporting the Pension Solution project testing team with test planning, test scheduling, development of processes and staffing requirements for defect triage assist with test case development and other test activities.

Associated Challenges:

- Ensure application meets the business, operational, and technology requirements.
- Analyze use cases, design specifications, and engage stakeholders to elicit detailed information about the application under test to gain in-depth knowledge of the application.
- Create automated tools using technologies such as VBScript, JavaScript that aid in testing the functionality and making the process more efficient.
- Conduct problem and impact assessment, gap analysis, process mapping, root-cause analysis, risk analysis and requirements elicitation.
- Contribute to the creation of a test strategy.
- Write code to create/modify scripts and programs to automate tests.



Business Solution



Mentis team helped in verifying and validating the performance metrics to meet business and end user expectations

Mentis team created the Test strategy, Test architecture, Test plan, Test Cases, Test Reports and Test Summary Reports, Test Automation Scripts, Requirement Traceability Matrix, Test Metrics and Deployment/testing instructions and achieved the following detailed below:

- Analyzed business specification documents, developing test plans, defining test cases, developing, and automating test scripts.
- Developed new and updated existing Automation test cases using Selenium WebDriver and TestNG using Git/GitHub as VCS for java-based web application, using Maven as Build tool.
- Used extensively Selenium Grid to execute test cases parallel on different target machines.
- Worked with developers and project managers to determine testing strategies for testing applications from a technical standpoint, in particular web services.
- Prepared Test Strategy Document, detailed Test Plans and Test Cases which specify testing overview and testing approach depending on the Business and Technical requirements.
- Managing product level test strategies, test plans, test data based on the business and systems requirement documents.
- Assist in the development of new tools to speed the adoption of automated testing organization wide and maximize re-use and commonality across teams.

Business Benefits



Stability, performance & easier maintainable new system to enhance overall productivity.



Proposed and created shared libraries of test steps that can be integrated into cross application test suites.



Development of new tools to speed the adoption of automated testing organization wide and maximize re-use and commonality across teams.



Implemented various frameworks like Data Quality Analysis, Data Governance, Data Trending, Data Validation and Data Profiling with the help of technologies like Data Stage, Python, Mainframe with databases.