University of California, Merced
Information Technology

GLAAS

Graduate Lecturer Academic Appointment System

2016 Larry L. Sautter Award Submission

Submitted By

Raj Panneer Selvam
Manager of Application Services
apanneerselvam@ucmerced.edu
209-228-4087

I. Core Team Members

- Raj Panneer Selvam, Technical project lead
- Mohammad Zaidi, Software Engineer
- Roger Borges, Software Engineer
- Jose Magana, Technical Project Manager

II. Departments Involved – 'Highly collaborative'

- School of Engineering
- School of Natural Sciences
- School of Social Sciences, Humanities and Arts
- Merritt Writing Program
- Academic Personnel Office
- Academic Payroll Office
- Graduate Division
- Research Accounting Services
- Health Science Research Institute
- Sierra Nevada Research Institute

III. Objectives for GLAAS – 'One solution for all schools'

With the continued exponential growth at UC Merced, key focus for this project was to provide a solution that supports the campus ongoing business needs by maximizing on automation and minimizing on resource efforts for support:

- Implement an automated application solution that is utilized by all UC Merced Schools which supports the overall processes for assignment and appointment of:
    - Lecturers
    - Teaching Assistants / Associates
    - Teaching Fellow
    - Readers
    - Graduate Student Researchers
- Promote standard business processes and workflows
    - Bring together a group of 40+ key subject matter experts and work through various business scenarios with goal of reaching standardized processes
- Standardize 20 + document templates used by different schools across multiple Academic Terms maintained by APO
- Automate and electronically track the Appointment process from AP Recruit to Appointment Package and Payroll worksheet Generation
- Automate and promote paperless communications
- Integrate with all key systems
- Analytical reports that supports forecasting, budgeting of TA, Lecturer and GSR assignments

IV. Innovation - 'Flexible and Configurable'

Design a system that supports ever changing campus business needs with minimal ongoing development support in a timely fashion.

- Configurable
    - Allow for configurations at Global, APO, School level – this provides maximum flexibility
    - Empower users to make decsions at school level while utilizing common system
    - Support ever changing campus business needs via highly configurable application structure. Examples include
        - Ability to add/remove academic terms/sessions
        - Ability to add/consolidate academic schools
        - Ability to switch between academic semester to quarter, if required

        - Various other updates like salary increases, adjustments to instructional work credit, etc.
- Flexible & User Friendly
    - Responsive user interface based on latest angular java script library

V. Features – 'Automation, standardization, and security'

Following is a high level list of key functionality supported by GLAAS:

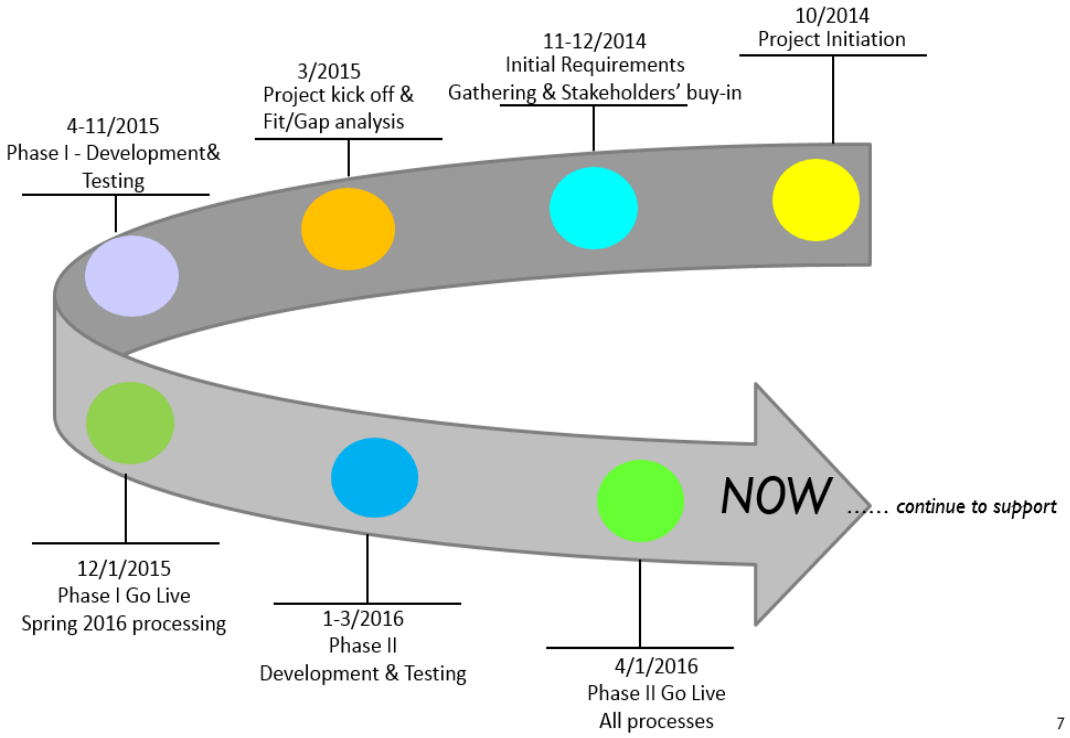
- Business processes that supports: allocations, assignments, and appointments
- Processing of appointments for all terms and types:
    - Fall, spring, summer (including multiple summer sessions)
    - Semester only appointments
    - Academic Year appointments
- Highly configurable ensuring flexibility and supportability
- Automated workflows for various approval levels
- Automated generation of various document packages that meets policy requirements mandated by Office of the President and union contracts
- Automated communications via emails throughout various business process cycles.
- Integrations with
    - Banner, student information systems(SIS), for class schedules
    - AP Recruit for job postings and appointment matching
    - Identity Management for current student/staff/faculty information
    - Finance for FAU validation
    - DBS2020, UC Merced solution for Document Archive and Storage
- Reports supporting operational needs
- Role base security and authorization
- Template-based Document Generation By (Appointment Type, Academic Term, School)
- Template-based Email Communication By (Appointment Type, Academic Term, School)
- Additional features that supports efficiencies. Examples:
    - File interface to system that grants door access
    - File archival and retrieval

VI. Implementation Approach – 'Agile and Collaborative'

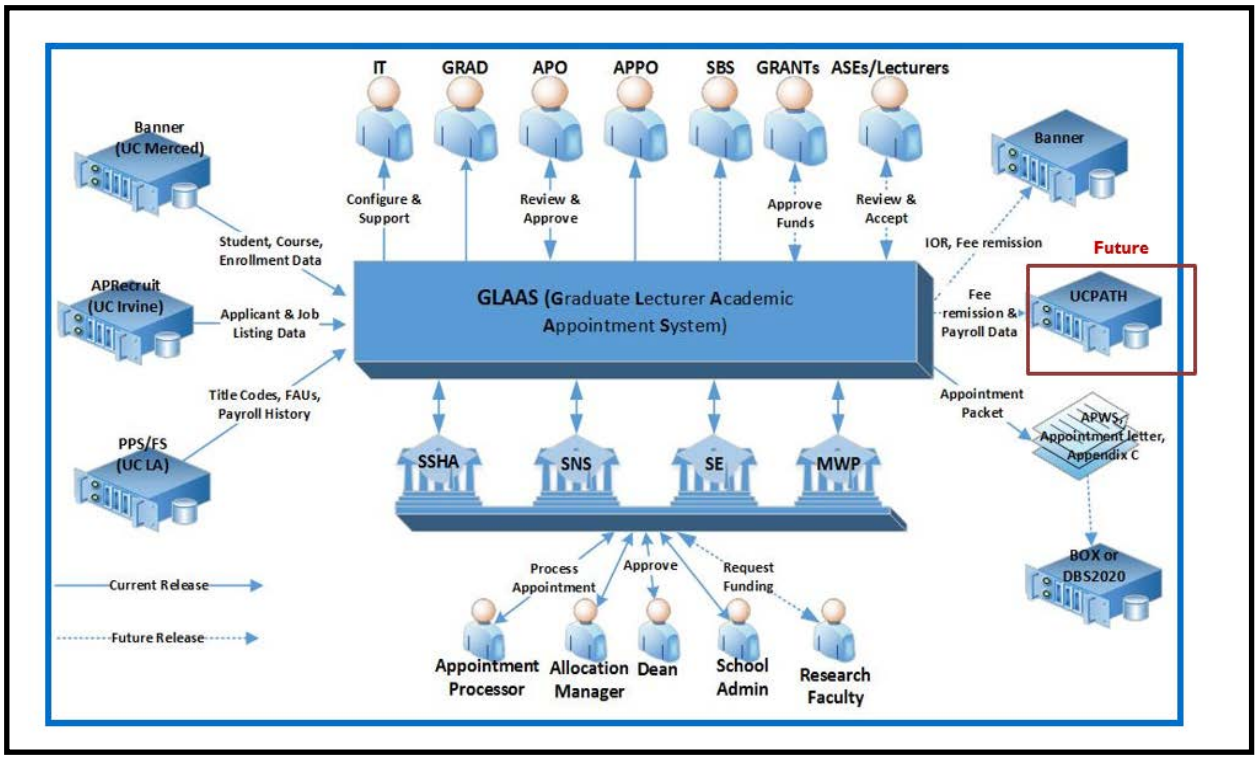
- Use GSAS [Graduate Student Appointment System] – developed by School of Engineering as the starting point for identifying key requirements by conducting fit/gap sessions
- Hold multiple requirements gathering sessions with key SMEs (subject matter experts) from APO, APPO, schools, writing program, and research fund representatives
- Develop prototypes, elicit feedback, and refine
- Conduct prototype review sessions
- Conduct testing
- Rollout solution in phases based on business priority

VII. Development and Implementation Timeframe – 'Multi-phase to ensure success'

- 16 months from project initiation to rollout of phase I and II



VIII. Architecture, Technology, & Interfaces – 'Flexible, configurable, & easy to maintain'



- **Technology**

Server-side technologies	Client-side technologies
• C# • .Net Framework • Web API/RESTful services • Entity Framework • SQL Server • Microsoft Fakes Framework • Elmah logging	• AngularJS • BreezeJS • Bootstrap • UI-Bootstrap • Font Awesome • Lodash • Toastr • JQWidgets

IX. Measuring Project Success – 'Met all objectives defined'

- Complete automation of assignment and appointment of academic appointments
- Highly configurable allowing support for ever-changing business needs
- Standardized processes and workflows
- Standardized document packages
- Automated communications
- Secure archival and retrieval of historical documents
- Integrated information – data at your fingertips

X. Roadmap – 'future functionality'

- Integration with UCPATH (for Fee Remission)
- Integrate additional data from AP Recruit
- Integrate hire information with SIS – speeds up assignment of instructor of record in SIS and makes data quickly available to local LMS (Canvas)
- Dashboard for candidates
- Offer Letter (Pre-Appointment) Document / Email Generation based on template
- Enhanced analytical reporting for forecasting and budgeting
- Other……

XI. Example screen prints