

UP Post-Doctoral Management Application

SoftServe Group

Project summary

- To manage all Post doctoral fellowships: From application to fellowship termination
- **Centralize** all data related to fellowships in a **single data store**
- **Digitize** & **Centralize** all processes involved with fellowships into a **single web application**
- Provide an environment which is: **auditable**, **secure**, **useable**, **available** and **persistent**

Tools used to develop

- **Java EE** – Provides us with a sturdy platform whereby we can achieve scalability, security and performance
- **MySQL** – Provides us with a proven RDBMS
- **Apache Maven** – Provides an excellent project build and management environment for us
- **Junit & Mockito** – Provides us with a solid unit testing framework
- **Java Persistence API** – Provides us with a ORM
- **Glassfish server 4**
- **NetBeans 8** – Provides us with a easy-to-use IDE
- **JSF & PrimeFaces 5** – Provides a powerful UI framework and visually impactful component library
- **JasperReports** – Reporting engine.

More on what we have done

- Persistence layer **entities** and **DAOs**
- **Back-end EJBs** for almost all use cases
- **Front-ends** for:
 - User login
 - User account management services
 - Audit Trail services
 - New application services
 - Application progress viewer
 - Referee Report services
 - Session management & user authentication
 - CV creation
 - On demand user account creation and activation
 - HOD approval service (Not yet test)
 - Dean endorsement service (Not yet tested)
 - Email notifications
 - **Reporting Services**
- **Updated Unit tests** for EJBs and Entities

What we have not yet completed

- Archival Front End
- Refined Archival backend features
- Client Requested System Changes
- Front end web page data validation
- Integration Testing

Challenges faced

- Getting the most out of **Jasper** and using it's **resource files**.
- Juggling other school work.
- Health concerns
- Implementing client requested changes without breaking code.
- Various **frustrating bugs** created by a misunderstanding of technologies.
- **Lots of research**

DEMO