Scalable CIS

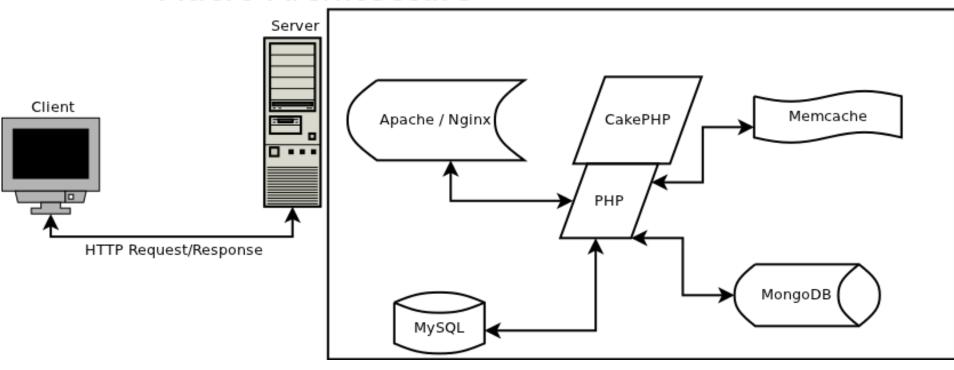
Integration of Service management with Assigned Tasks Using Customer Interaction System

Abstract

Managing and resolving customer issues is one of the main components of the Maintenance Phase of SDLC. This process is simplified with the help of Customer Interaction Systems. Organisations making use of such tools must adapt the systems based on the number of clients, as Current systems are far from flexible or scalable. The system proposed solves the problem of scalability and flexibility by integrating a document oriented NoSQL database which allows for data to be semi-structured which improves the overall throughput of the application.

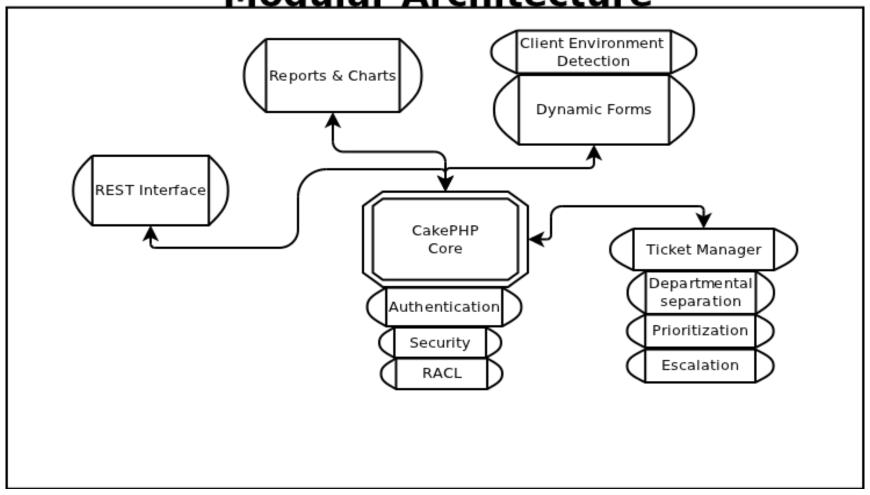
Architecture: Macro

Macro Architecture



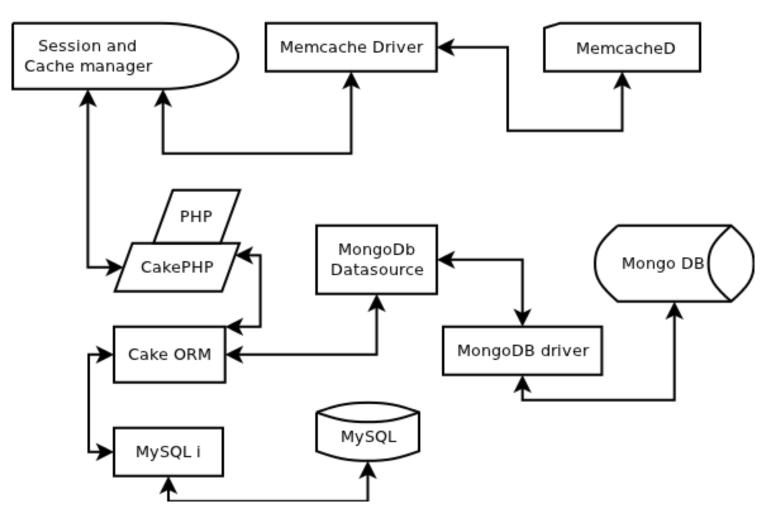
Architecture: Modular

Modular Architecture



Architecture: Data

DATA ARCHITECTURE



Modules

- Authentication
- . RACL
- Dynamic Forms
- Departmentalization
- Prioritization
- . Escalation
- Security

- . REST Interface
- Reports and Charts

- . Mongo DB Models
 - MySQL Models

Current Progress

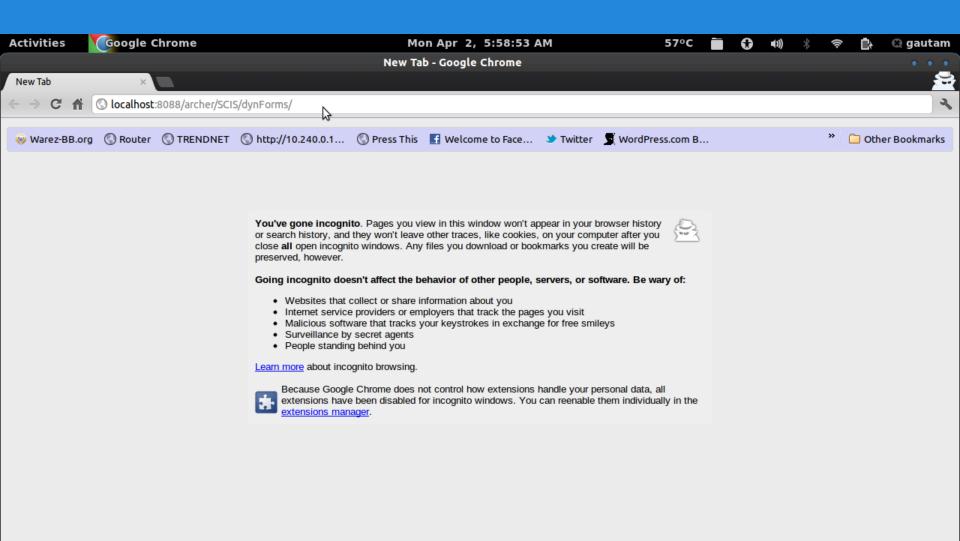
- . Authentication
- . RACL
- . Dynamic Forms
- Departmentalization
- Prioritization
- Escalation
- . Security

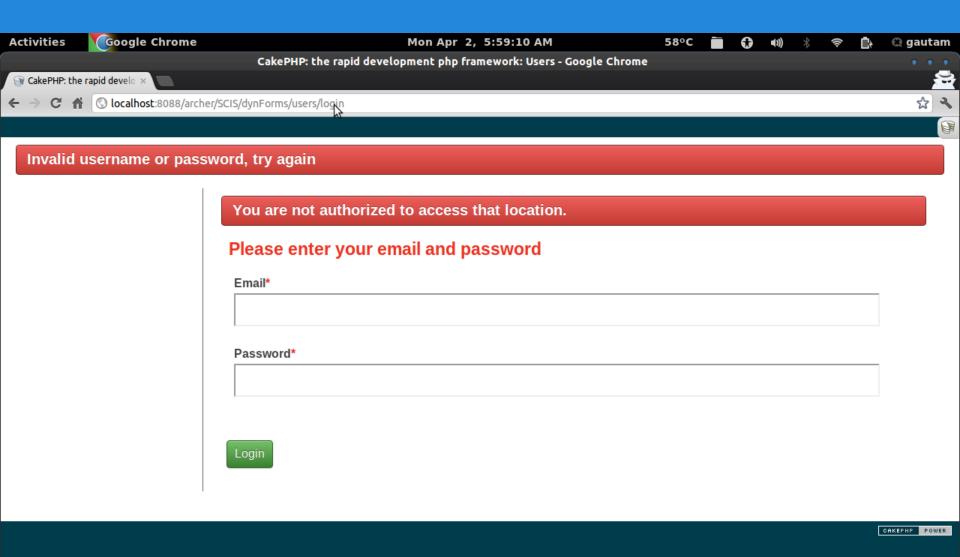
- . REST Interface
- . Reports and Charts

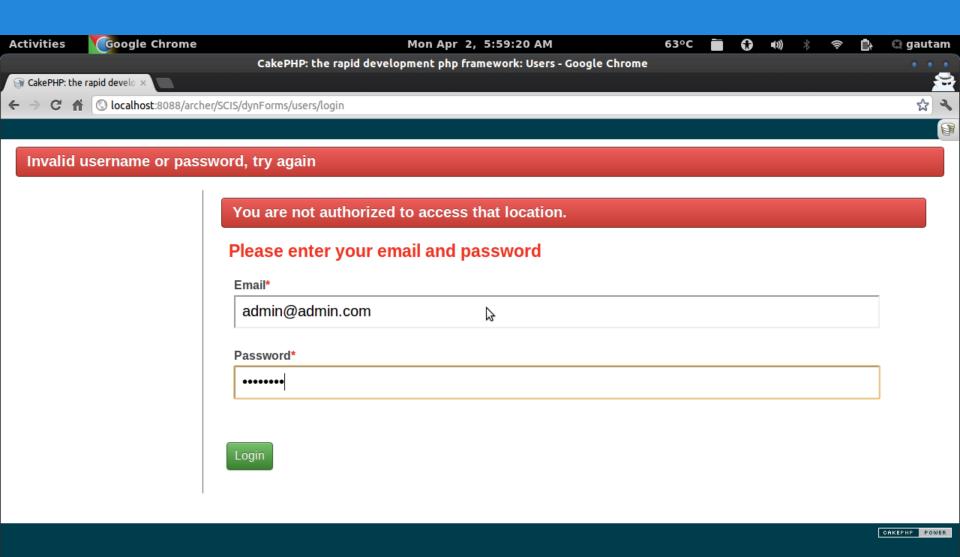
- . Mongo DB Models
 - MySQL Models

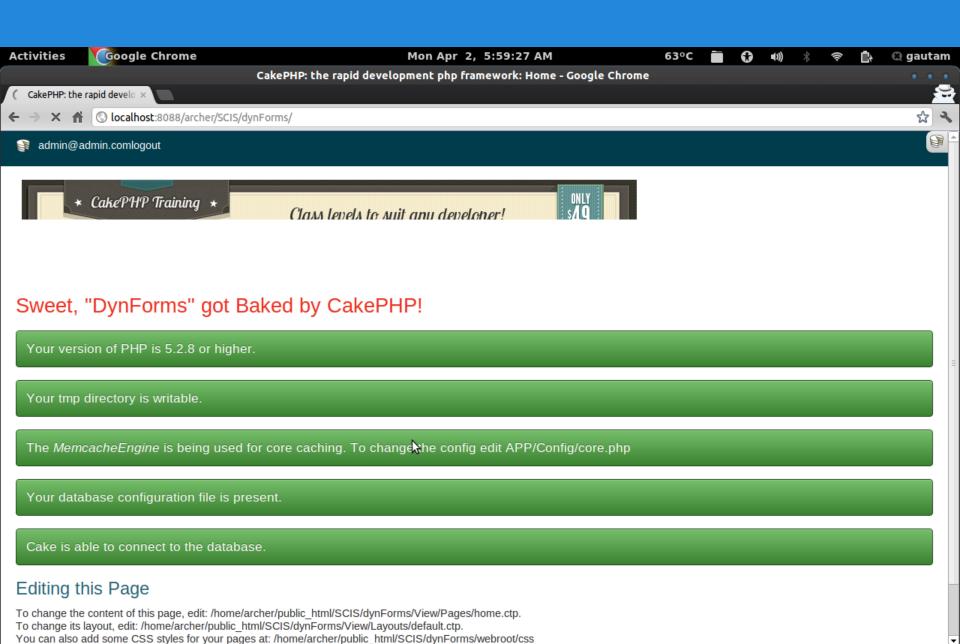
Current Progress: Authentication

- Database model for user authentication
- Login and Logout functionality
- Access restriction to sensitive pages







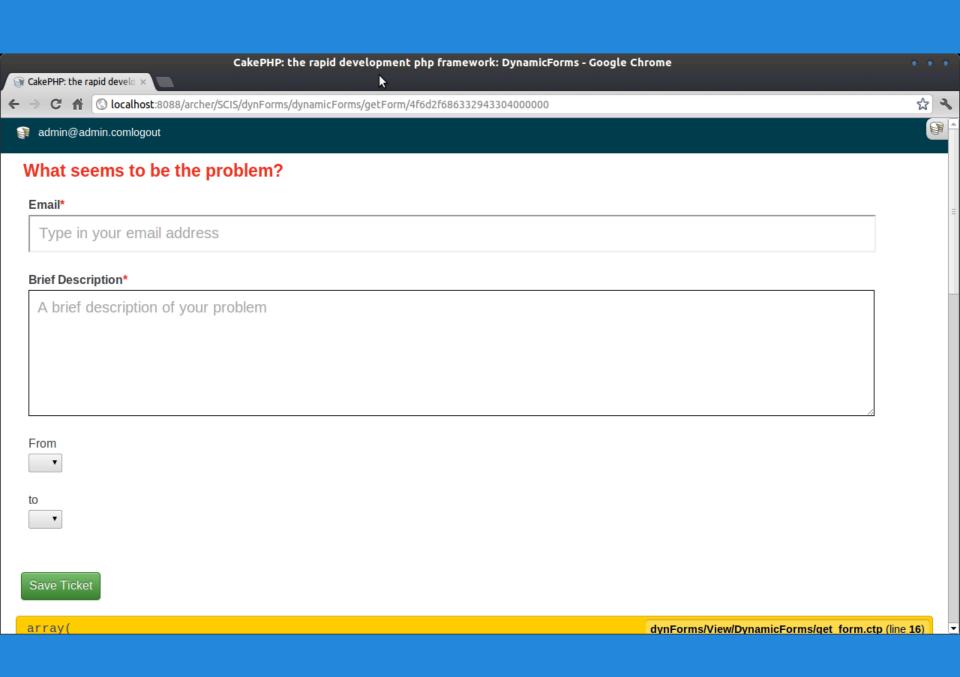


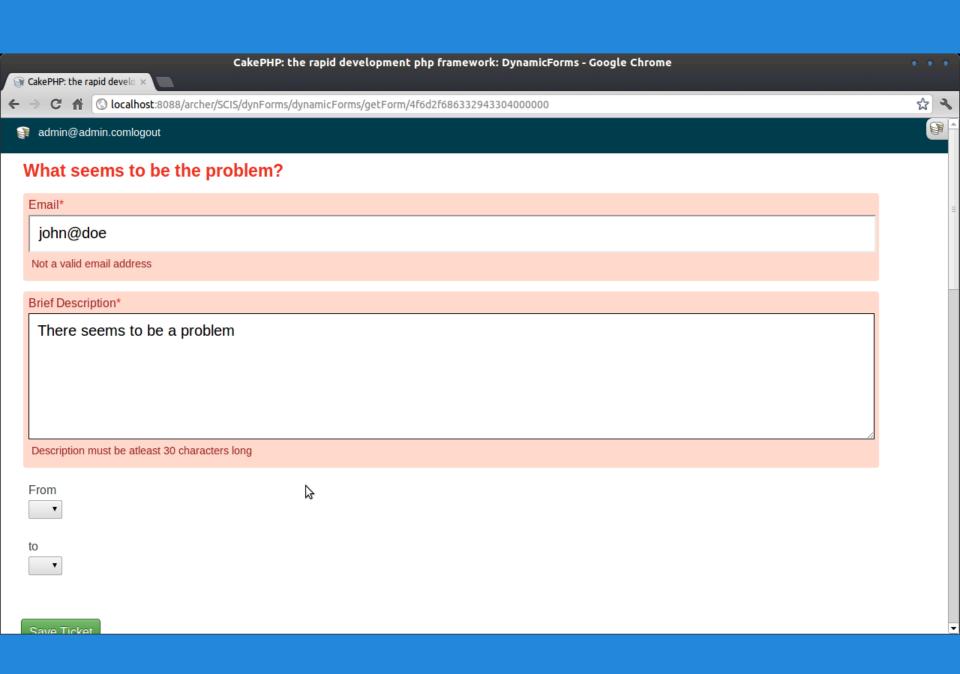
Current Progress: Dynamic Forms

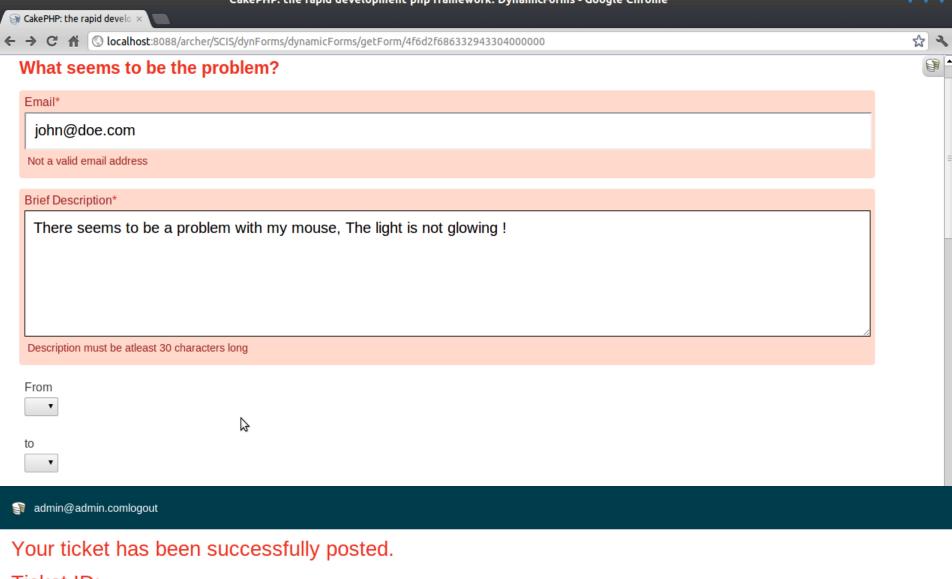
 Custom Schema for storing Dynamic Form information

- Custom Schema for storing Responses from Dynamic Forms
- Dynamic Form Generation based of Schema defined

Form Data validation







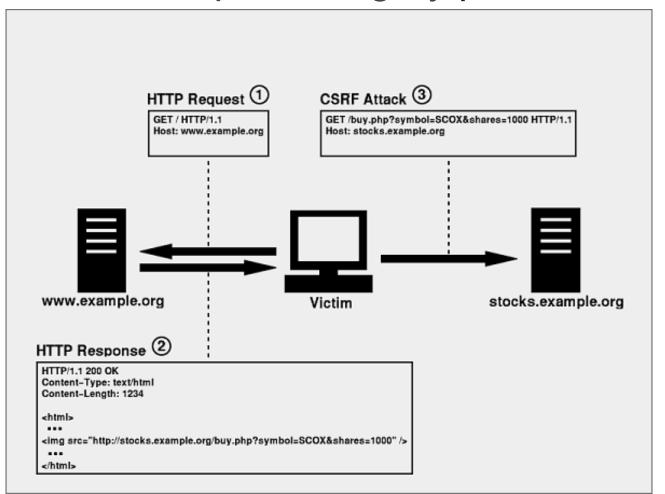
Ticket ID:

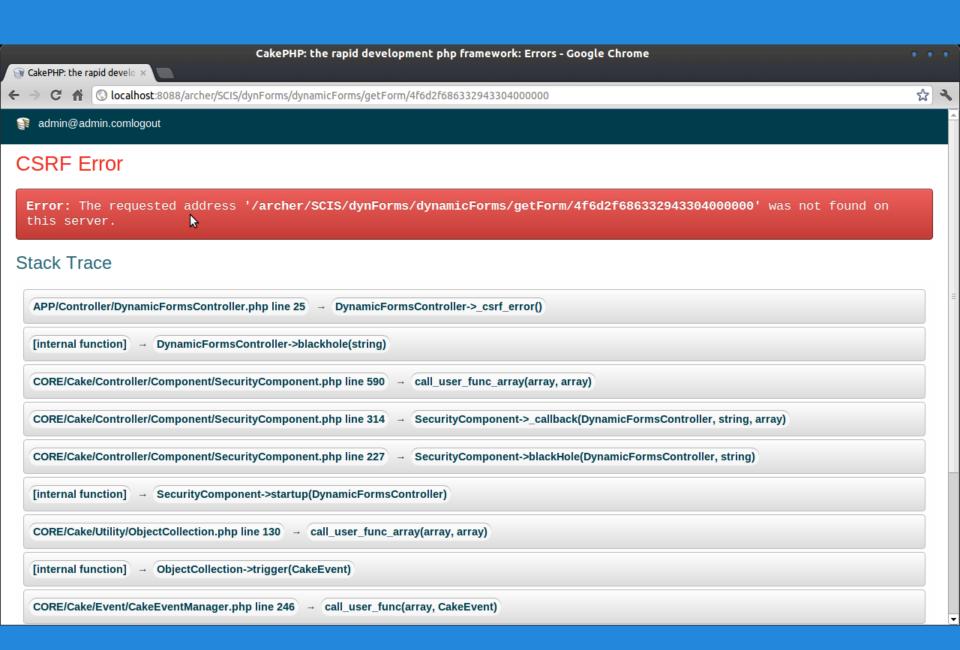
4f78fc4d6332943304000000

Please keep your ticket ID safe, so as to view its status later.

Current Progress: Security

Cross Site Request Forgery protection





Mongodb: DynamicForm

- _id
- options
- inputs
 - input_name
 - type
 - html attributes
- validation
 - o input_name
 - validation_rules

Mongodb: DynamicForm Response

- _id
- dynamicForm_id
- Abstract Data based on Form
- escalation
- department
- client_info
- status
- created
- modified

Schema Diagram

	DynamicForm		
	¹_id	MongoID	
1	dynamicForm_id	MongoID	
	°Form_Data	array	
	°created	datetime	
	°modified	datetime	
	∘escalation	int	
	odepartment_id	foreign_key	
	°client_info	array	
	∘status	string	

DynamicForm			
*_id	MongoID		
°options	array		
°inputs	array		
°inputs.input_name	array		
°inputs.input_name.type	inputType		
°validation	array		
°validation.input_name	array		
°validation.input name.validation rule	validationRule		

Environment

- Arch Linux
- Apache 2.2
- PHP 5.3.10 + MongoDB driver 1.2.9 + Memcache driver 3
- MongoDB 2.0.4
- MySQL 5.5
- Memcached 1.4
- CakePHP 2.1 stable + MongoDB Datasource
- GIT + Github for Revision control

Thank you!

Team Members

- K.Gautam
- V.Vinoth
- D.Ashok

Guide

Mrs.K.Kalaivani