Meteocal Project Presentation

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Project Phases

Requirements
Design
Implementation
Testing
Acceptance Testing
Project Report

Requirements

What should the system be?

Requirements

The system should be an event planner with weather functionalities

Requirements

Who will use the system?

Requirements

Different users with varying backgrounds and technological expertise

Requirements

What requirements should be satisfied?

Requirements

Functional Requirements

Requirements

- Registration
- Login
- Event creation
- Event update and deletion

Requirements

- Inviting users
- Managing invitations
- Weather alerts

Requirements

Non functional requirements

Requirements

- Ease of use
- Stability
- Maintainability
- Portability
- Security

Requirements

Scenarios and Use cases

Design

Which architecture should be used?

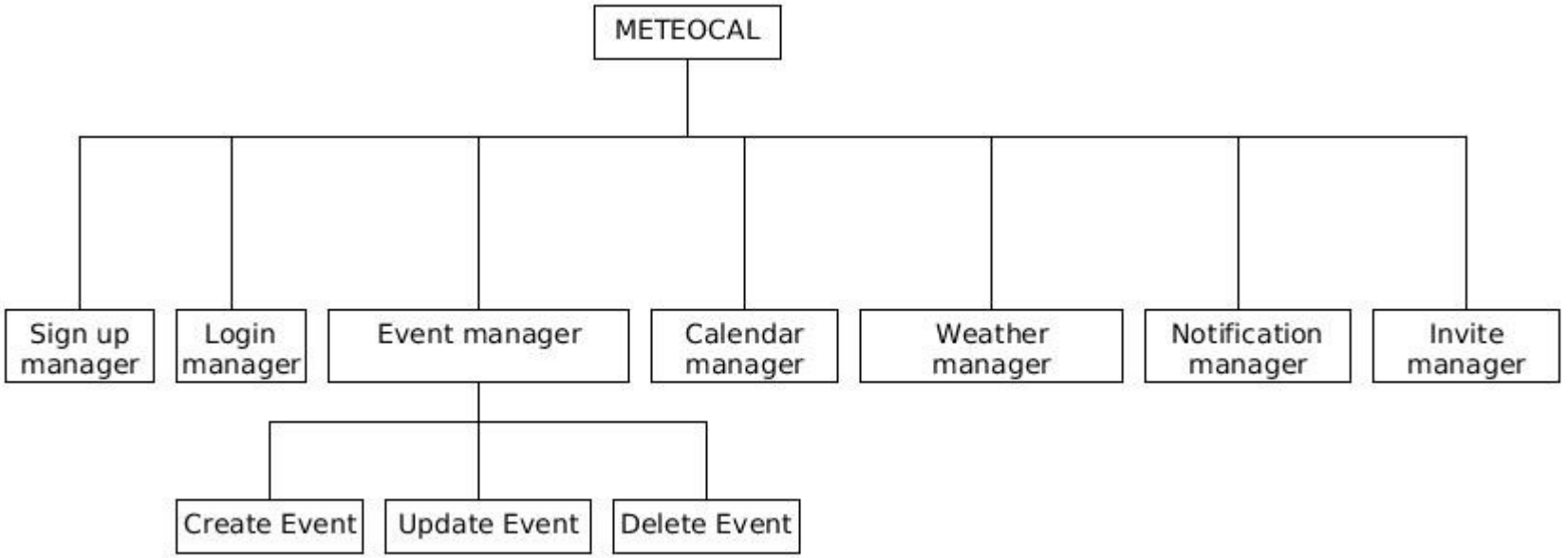
Design

JEE has a 4-Tiered architecture

Client – Web – Business – Data

Design

Subsystems

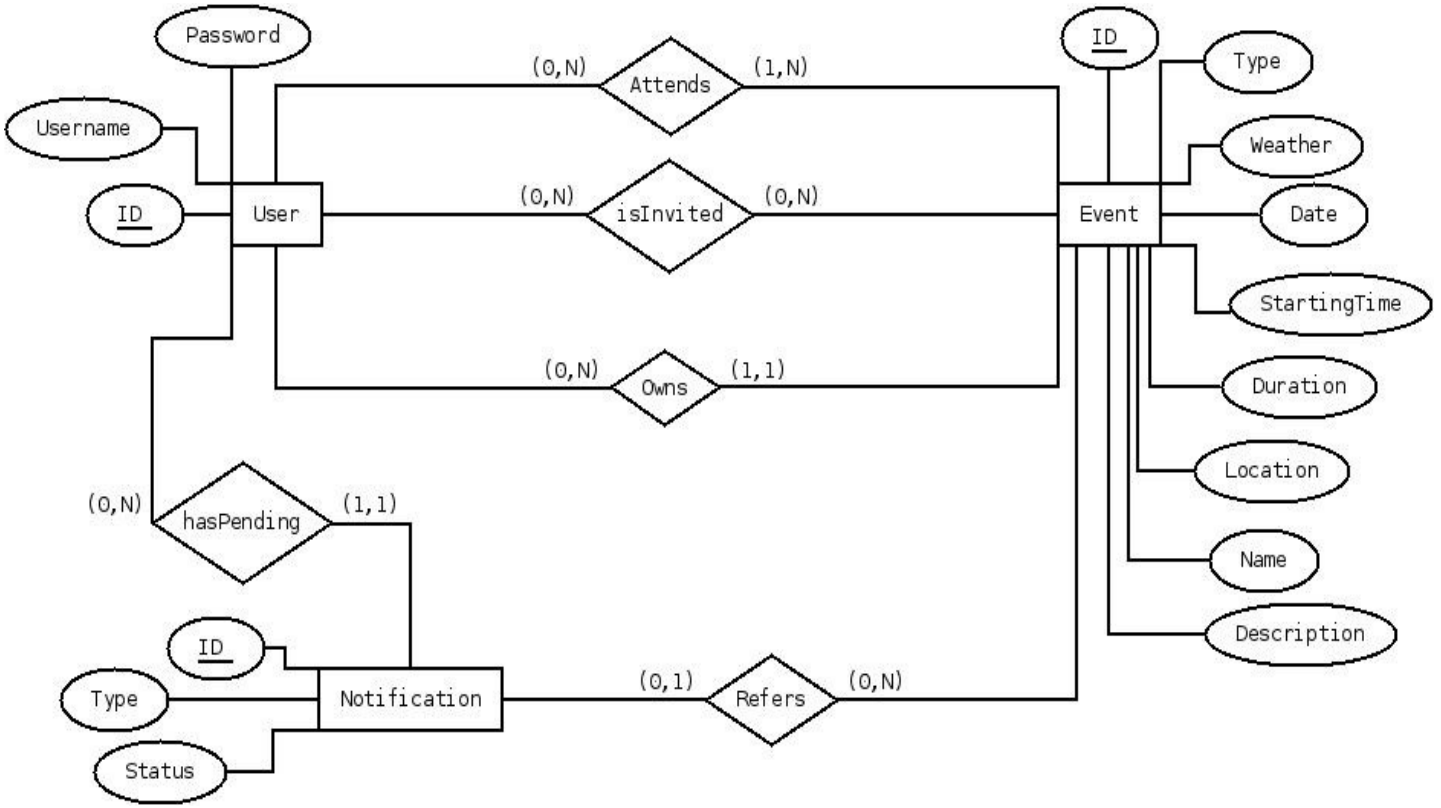


Design

Persistent data management

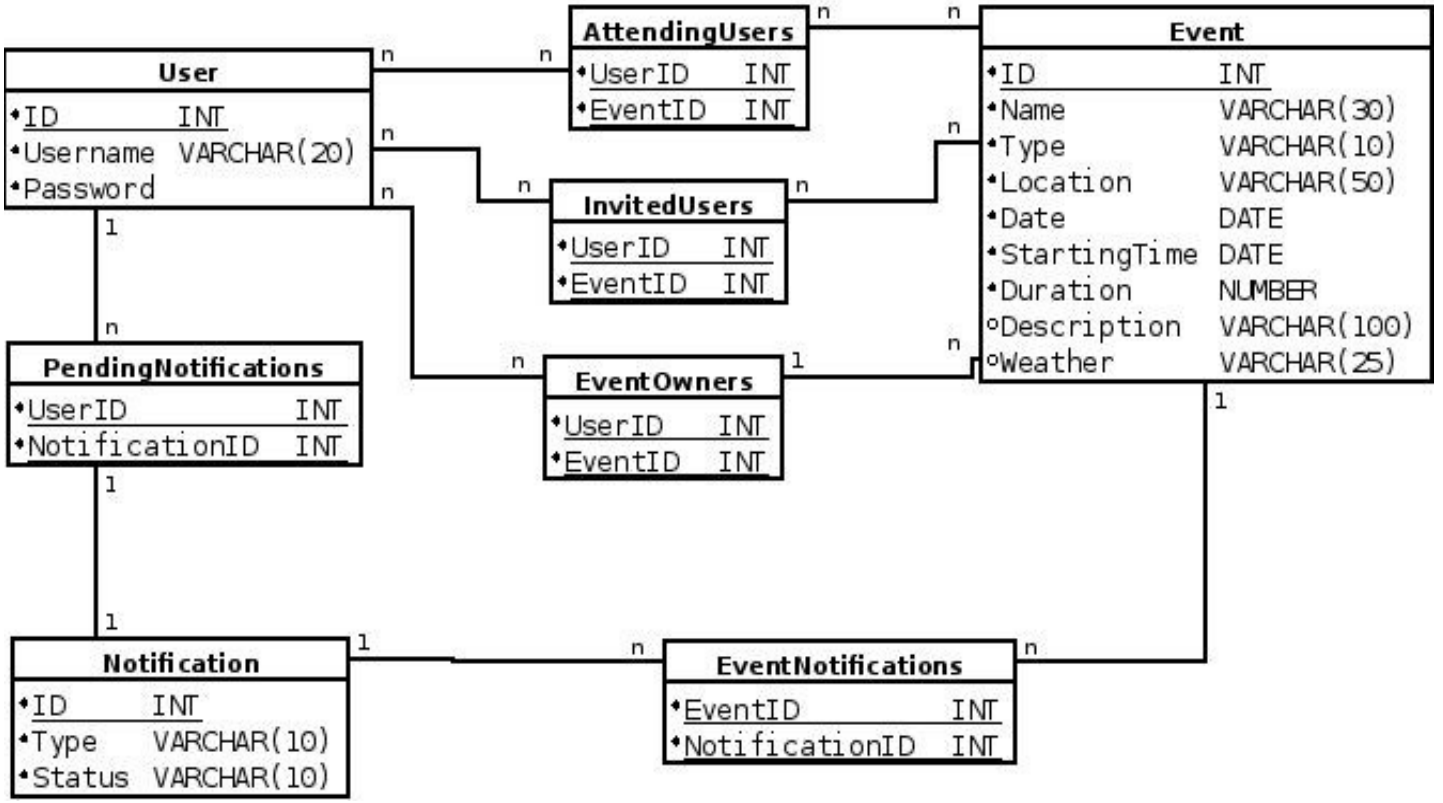
Design

Conceptual model



Design

Database diagram

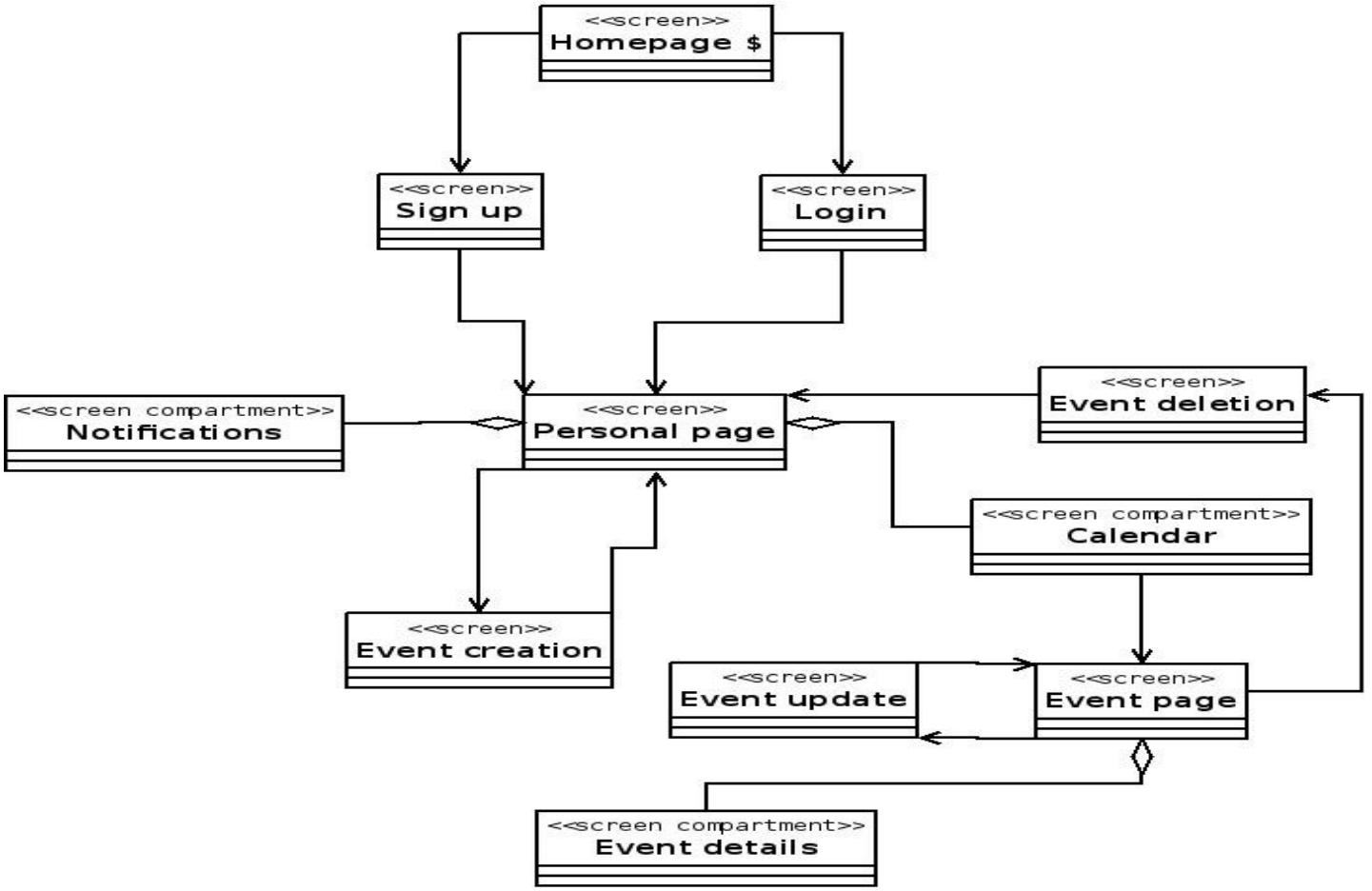


Design

User Experience

Design

UX Overview



Implementation

3-Tiers inspired implementation
Influenced also by BCE diagrams

Implementation

Presentation

JSF + JSF managed beans

Implementation

Control

EJBs

Implementation

Data

Entities

Implementation

Some additional helpers
for weather and time

Implementation

DEMO

Implementation

Requirements changes

- Modifiable past events
- Case insensitive user names
- Weather alerts sent immediately

Implementation

Design changes

- Logical data model
- User Experience

Testing

Automatic testing
Manual testing and verification

Testing

Tested major aspects of the system considering inputs, outputs, consequences and possible exceptions

Acceptance Testing

Tests were mostly based on the released testing document of the assigned project

Acceptance Testing

The system performed well and was functional

Acceptance Testing

Some bad inputs were not accounted for and could cause exceptions

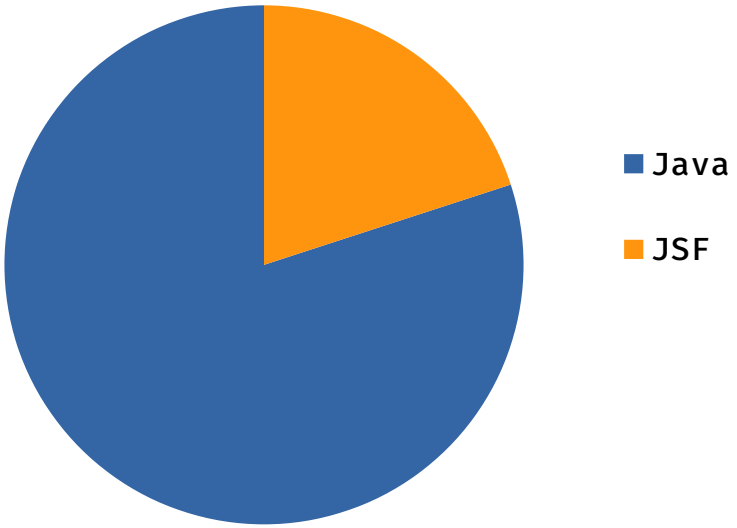
Project Report

Actual Data
Function Points Analysis
COCOMO II Analysis

Project Data

Size

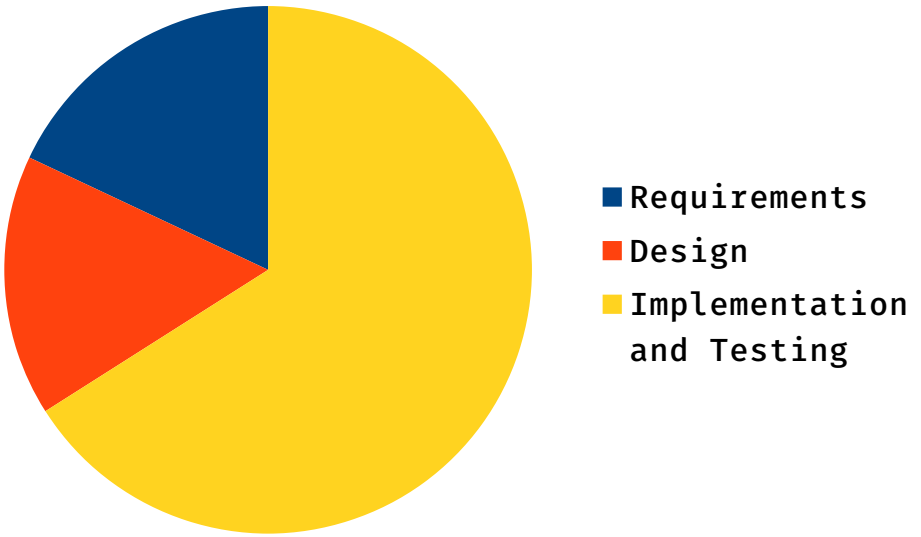
1582 SLOC



Duration

113 hours

2 months



Function Points Analysis

Category	FPs
ILF	27
EIF	5
External Input	34
External Output	0
External Inquiry	10
TOTAL	76 FPs

Function Points Analysis

Most of the FPs are due to the
External Input and the
Internal Logic Files

Function Points Analysis

The expected LOC size is 1596, close to the actual SLOC size of 1582

COCOMO II Analysis

Effort ≈ 1.64 person-months

Duration ≈ 4.28 months

Members ≈ 0.38 persons

With real duration

Members = 0.82 persons