Peregrine Project

Plans of Attack

Devon Gleeson, Kyle Paulsen, Nicholas Benson, Anh Nguyen, Chinh T Cao, Weixiong Lu

Project Overview

Project Summary
- We are building an n-tiered application logger that fits into a Service Oriented Architecture.

Team Breakdown
- 3 sub teams: **User Interface** (Anh and Chinh), **Service API** (Devon and Kyle), **Persistence** (Wilson and Nick)

Tools
- Jira and Greenhopper: Project Planning/Tracking, Bug Repo
- ReviewBoard: Remote code review
- Jenkins: Continuous Integration
- Github: Source code management.

Project Plan

- We'd like to thank our sponsor Joe Capell from A-DEC

- Use SCRUM to track our progress throughout the project.

- Two week sprints.

- Enter code complete two weeks before the end of the next term.

- Basic acceptance criteria
    - Documentation
    - QA'd by another team member
    - Code reviewed by at least 2 other people.

Project Architecture
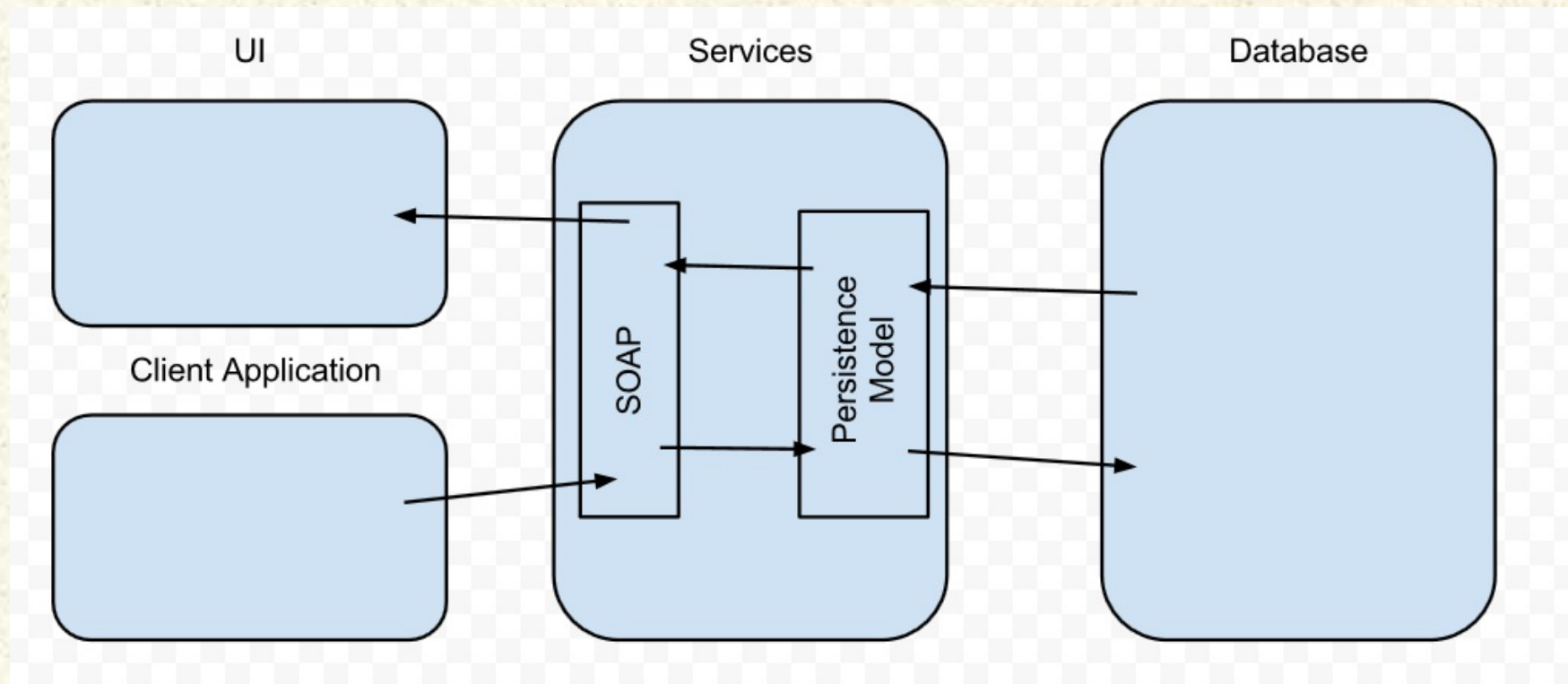
- Building a WCF Service Layer that accepts log messages from client applications.
- The UI will use the service to communicate with the database.
- Having a well defined service layer allows for clean separation of concerns.

There are two alternative ways to build SQL database with C# on Visual studio. With following pros and cons considerations on both of alternatives, we make an architecture decision to implement database in linq to SQL libary,
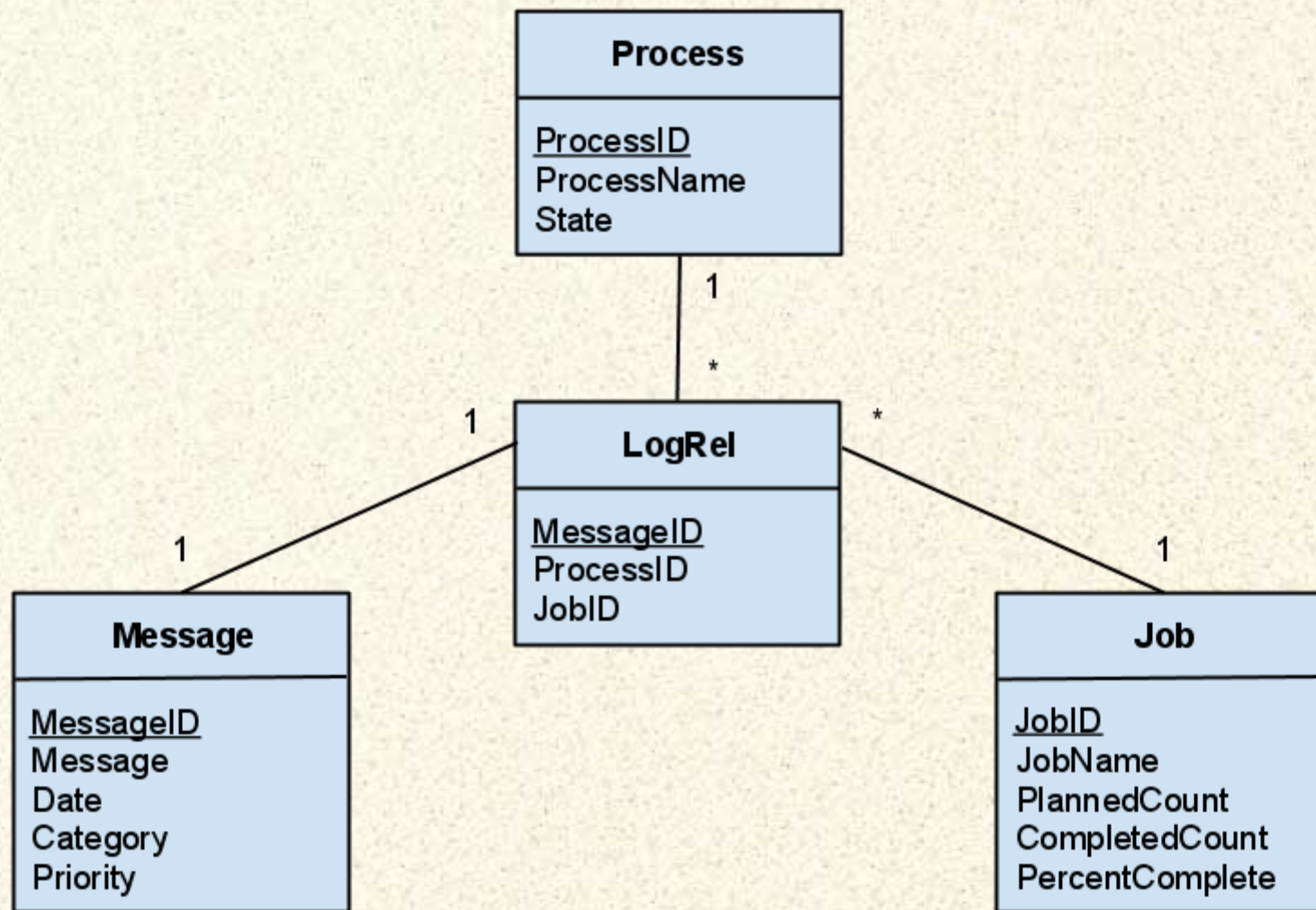
1. Use linq to SQL
   ● Pros: Can develop application in short time
   ● Cons: Not as flexible as Entity frame work

2. Use Entity frame work
   ● Pros: Flexible and scalable/Can handle data base other than SQL
   ● Cons: Take more effort to build

http://maxivak.com/entity-framework-vs-linq-to-sql/

Database Schema

Process

ProcessID
ProcessName
State

LogRel

MessageID
ProcessID
JobID

Message

MessageID
Message
Date
Category
Priority

Job

JobID
JobName
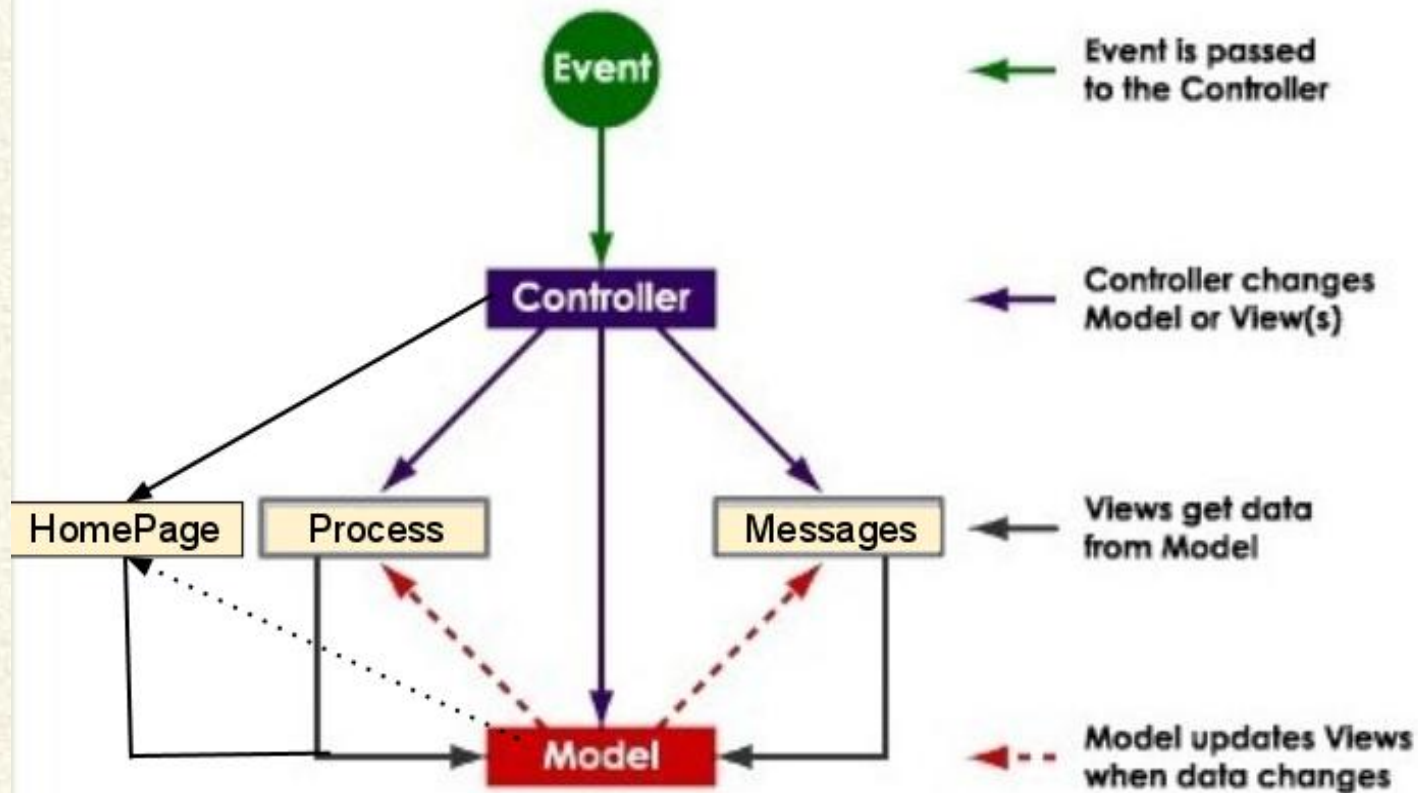PlannedCount
CompletedCount
PercentComplete

Category: *General, Priority, Error, CriticalError, Information, JobStart, JobProgress, JobPercent, JobComplete, ProcessStartup, ProcessShutdown, ProcessState, etc...*

The MVC abstraction can be graphically represented as follows.
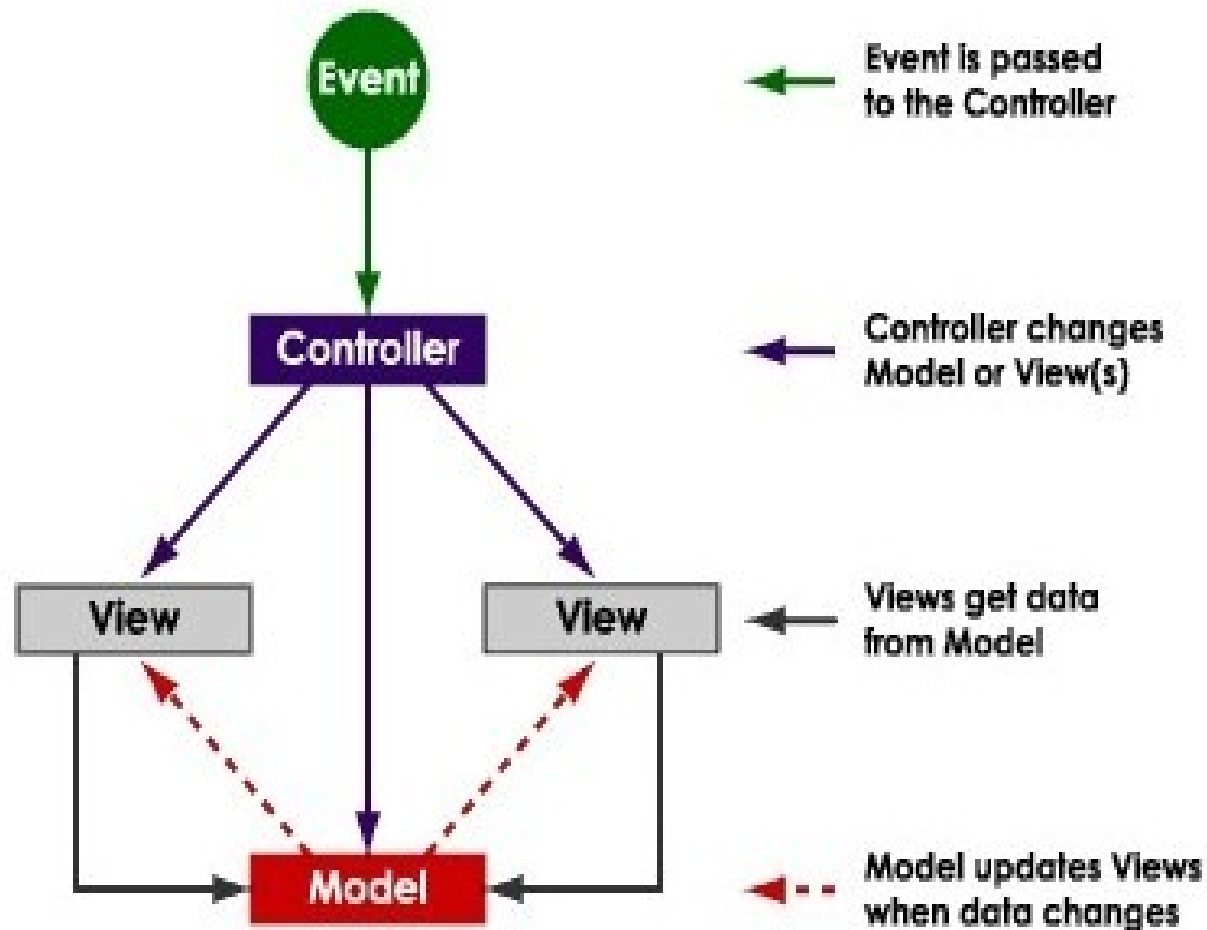
The MVC abstraction can be graphically represented as follows.

UI mockup and prototype

Used technology:
1. Asp.net mvc3
2. AJAX
3. jquery plugins "datatables"
4. HTML5

UI mockup main page
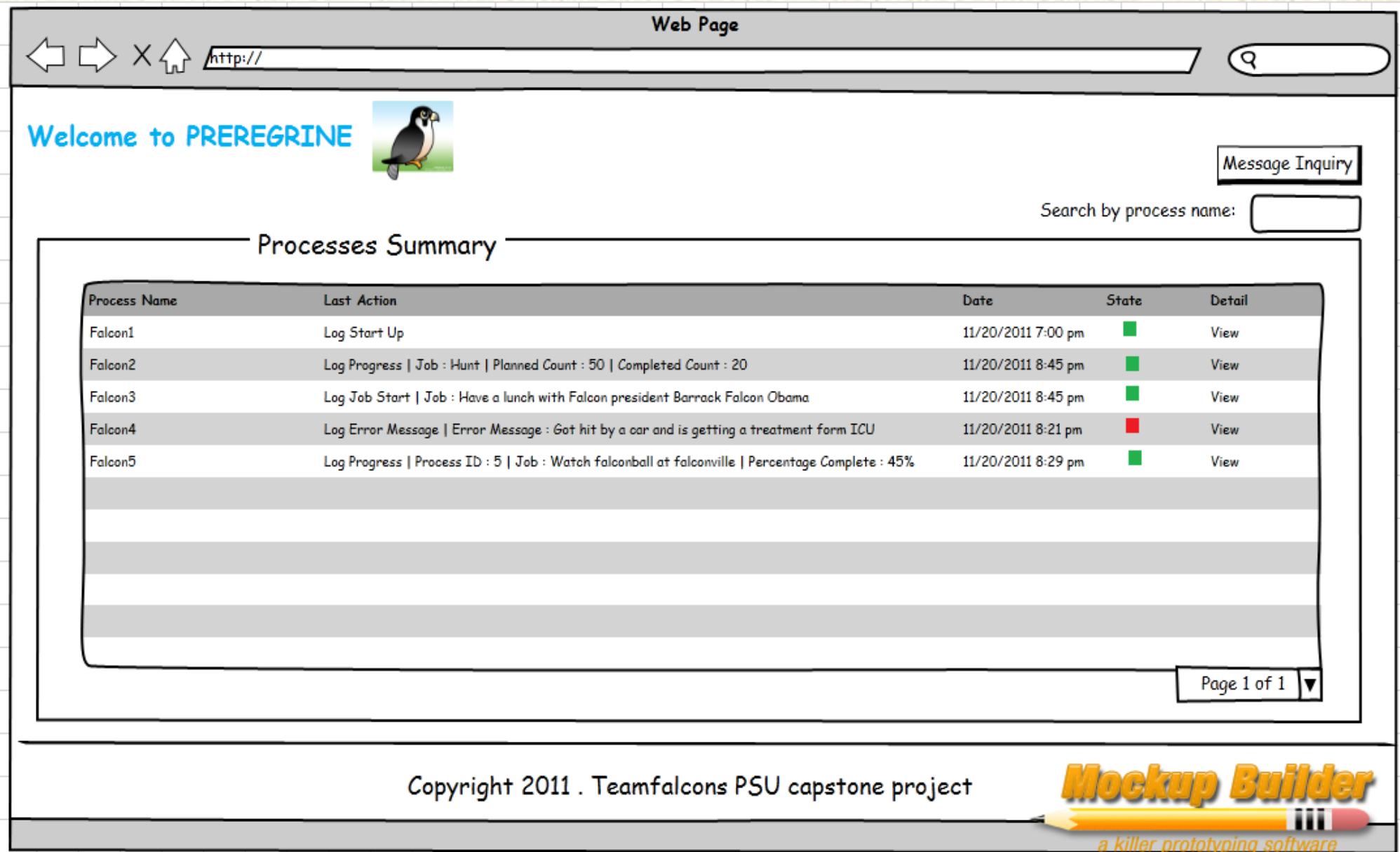
UI mockup individual process page

UI mockup message inquiry page

Web Page

http://

PEREGRINE _ Message Inquiry

Get messages of process name :

Get startup and shutdown messages

Get messages of the priority :

Result

Process ID	Process Name	Message	Priority	Date
3	Falcon3	Have a lunch with Falcon president Barrack Falcon...	4	11/20/2011 8:45pm
3	Falcon3	I am terrific	n/a	11/20/2011 7:45pm
3	Falcon3	Done with falcon java programming	2	11/20/2011 7:50pm
3	Falcon3	I am born	4	11/20/2011 7:00 pm

Page 1 of 1

Mockup Builder

a killer prototyping software

UI prototype of main page

http://ntanh1989.com/Views/Home/