

HR Absence and Holiday Planner

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Background and Context

- Youmanage HR Ltd
- Who are Youmanage?
 - Software house based in Innovation Park, Stirling
 - Their principal product is a web-based application that is designed to ease the management of the people who make up an organization.
 - Youmanage have several clients, ranging from 40-400 people.
 - Undergoing rebranding, and a recent move between versions.
- My project is to redesign and reconstruct the **Absence and Holiday Planner**.



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The Underlying Architecture

- Multi-tier Architecture**
 - VB.NET/ASP.NET
 - Movement towards C#
- Front-end**
 - Mark-up: HTML, CSS.
- Business Layer**
 - Business Logic
- Database Layer**
 - The Youmanage application has a 5-server architecture, where client data is hosted remotely (In Reading).
 - Each of the servers are configured to run Windows Server 2008 R2, Microsoft IIS8 and ASP.NET 4.5.
 - Database maps to objects using Data sets.

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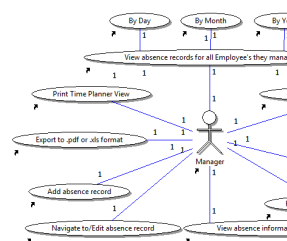
The Existing Time Planner

Time Planner

- Timekeeping
- Sickiness
- Other
- Maternity/Paternity/Adoption/Ordinary Leave
- Multiple Absence Records
- Holiday
- Holiday Request
- Bank Holiday
- Maternity/Paternity/Adoption-Additional Leave

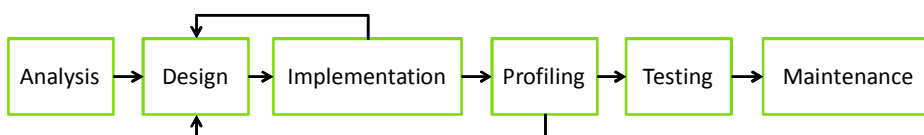
Requirements

- To completely rebuild and reconstruct the existing time planner to improve efficiency, accommodate scalability and have less process greediness.
- Replication of functionality = “Must have requirements”, additional features = “Would like requirements”
- To map the database into objects using Microsoft's object-relational mapper, Entity Framework.
- Using the following **technologies**:
 - VB.NET, C#, JQuery/Javascript, AJAX/JSON, ClosedXML, ASP.NET MVC, ASP.NET, MS SQL/ SQL, Entity Framework, HTML, CSS, XML, Xunit.



Expected Design Approach

- Systematic design approach
- Agile/Prototyping
 - Iterative...



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Actual Design Approach

- Systematic design approach
- Agile/Prototyping
 - **HIGHLY** iterative.

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    graph LR
      Analysis --> Design
      Design --> Implementation
      Implementation --> Profiling
      Profiling --> Testing
      Testing --> Maintenance
      Profiling --> Design
      Testing --> Implementation
      Maintenance --> Design
      Maintenance --> Analysis
      Profiling --> Analysis
      Profiling --> Design
      Profiling --> Implementation
      Profiling --> Profiling
      Profiling --> Testing
      Profiling --> Maintenance
  
```

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The Solution

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Absence & Holiday Planner - Month View

Export Print Excel Day Week **Month** Year Custom
Go To: Go

| | Mon 01 | Tue 02 | Wed 03 | Thu 04 | Fri 05 | Sat 06 | Sun 07 | Mon 08 | Tue 09 | Wed 10 | Thu 11 | Fri 12 | Sat 13 | Sun 14 | Mon 15 | Tue 16 | Wed 17 | Thu 18 | Fri 19 | Sat 20 | Sun 21 | Mon 22 | Tue 23 | Wed 24 | Thu 25 | Fri 26 | Sat 27 | Sun 28 | Mon 29 | Tue 30 | Wed 31 | |
|-------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--|
| Arakim Sklyavskor | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Angel Balista | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Average Jon | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bobby Pitt | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bruce Wayne | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Captain Insano | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Chris Bees | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Good Spot | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Deborah Morgan | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Derek Fisher | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Dex Morgan | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Dex Pittman | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Harry Hill | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Jenna Hendrix | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Leslie Hill | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Maurice Davidson | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Michael Jackson | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Shawn McKeown | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

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The Solution

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Absence & Holiday Planner - Month View

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Future Steps

- **Testing**
 - Functionality
 - White/Black Box, xUnit unit testing.
 - Usability
 - “Think aloud” protocol (Krug)

Thanks for your time!

... Any Questions?

<http://gem.youmanagehr.com>