

SATELLID: PERSONAL KNOWLEDGE MANAGER

with Web Technologies

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Introduction

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Analysis & Design

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Conclusion & Suggestion

INTRODUCTION

There are tons of **daily personal knowledge** that must be managed,
but they can't be handled with regular tools.

Daily personal knowledge are things like details of:

- people profile and contacts
- list of organizations and companies
- glossary of definition
- hardware and software product listing
- publication of books or presentations
- known or visited places
- upcoming and attended events
- multimedia info such as music or video
- and lot of other miscellaneous things

There are a lot of tools and systems for each of them.

Need for just a single system

How to manage those **daily personal knowledge** with single system?

Solve a problem around *daily knowledge management* with a system to make it more effective.

Define and develop a knowledge manager called
“Satellid knowledge manager”, that built using Web technologies.

1. How to manage tons of personal knowledge we have with just a simple and single system of knowledge manager?
2. How can knowledge manager naturally structure the data into knowledge that has context?

- Create a *simpler system* to do daily knowledge management for personal use
- The main methodologies are agile, MVP, and ATDD.
- The main technologies are MongoDB, JavaScript, and Meteor framework.

LITERATURE STUDY

Data-Information-Knowledge-Wisdom (DIKW),
Knowledge Management System (KMS),
Personal Knowledge Manager

Agile methodologies,
Minimum Viable Product (MVP),
Acceptance Test Driven Development (ATDD)

BROWSE, READ, EDIT, ADD, DELETE (BREAD),
simple interaction and interface design with mockup,
Single Page Application (SPA)

Document-based NoSQL database called MongoDB

With JavaScript related technologies,
build a Web application,
that use full stack framework called Meteor

ANALYSIS & DESIGN

SATELLID

Target user:

Person who frequently gather and need to manage their knowledge at almost everytime.

User Types:

Regular person, researcher, engineer, developer, designer, information architect, event speaker, student, teacher, leader, collaborator, colleagues, recruiter, etc

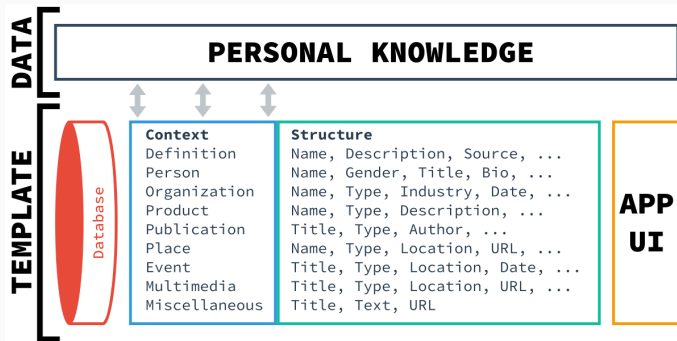
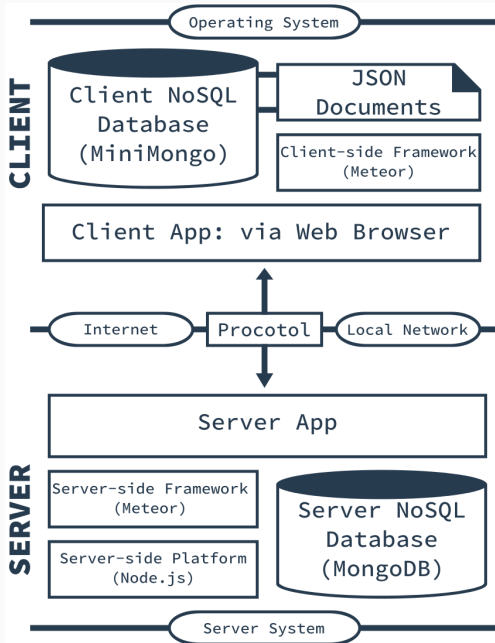


Figure 1: A data and template approach to classify the knowledge with its context and structure.

DESIGN: APPLICATION ARCHITECTURE



IMPLEMENTATION & TESTING

Snippets of Server Code

```
if (Meteor.isServer) {  
  Meteor.startup(function() {  
    ...  
  });  
}
```

Snippets of Client Code

```
if (Meteor.isClient) {  
  Template.add.events({  
    "click": function() {  
      ...  
    }  
  });  
}
```

After running in local, app result is available at
`localhost:3000`

After deploying, app result is available at
`http://satellid.meteor.com`

SATELLID

Browse your knowledge...



Definition

Name: Knowledge
Desc: The psychological result of learning that has a context
Source: Open Thesaurus
Author: Open Thesaurus Team
URL: <http://openthesaurus.com/knowledge>

Person

Name: Muhammad Haidar Hanif
Gender: Male
Title: Technology Generalist, JavaScript Developer
Website: <http://mhaidarhanif.org>

Product

Name: Google Search
Type: Software, Service
Desc: Internet search engine
Creator: Google Inc.
URL: <https://google.com>

Miscellaneous

Title: Random example
Text: Random sentence example
URL: <http://example.com>

Product

Name: Meteor
Type: Software

SATELLID

JavaScript

**Definition**Name: **JavaScript**

Desc: Lightweight, interpreted, object-oriented language with first-class functions, most known as the scripting language for Web pages

Source: Mozilla Developer Network (MDN)

URL: <https://developer.mozilla.org/en-US/docs/Web/JavaScript>**Person**

Name: Muhammad Haidar Hanif

Gender: Male

Title: Technology Generalist, **JavaScript** DeveloperWebsite: <http://mhaidarhanif.org>**Product**

Name: Meteor

Type: Software

Desc: Complete open source platform for building web and mobile apps in pure **JavaScript**

Creator: Meteor Development Group (MDG)

URL: <https://meteor.com>**Miscellaneous**

Title: Random example

Text: Random sentence example with **JavaScript** wordURL: <http://exampleofjavascript.com>**Event**

Title: JSConf

SATELLID

Browse your knowledge...



Context ▼

Name

Type ▼

Desc.

Location

DateTime to

URL

SAVE

CANCEL

Definition

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Product

Name: Google Search
Type: Software Service

SATELLID

**Definition**

Name: Knowledge

Desc: The psychological result of learning that has a context

Source: Open Thesaurus

Author: Open Thesaurus Team

URL: <http://openthesaurus.com/knowledge>

Context	Event		
Name	HCI International 2015		
Type	Conference ▼		
Desc.	17th International Conference on Human-Computer Interaction		
Location	Los Angeles, California, USA		
DateTime	2/8/2015	09:00	to 7/8/2015 17:00
URL	http://2015.hci.international		



SAVE

CANCEL

Product

Name: Google Search

Type: Software Service

SATELLID

Browse your knowledge...



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Product

Name: Meteor
Type: Software

CLOSING

Simple and single **system** of managing tons of **personal daily knowledge** that implemented with **Web technologies**

There could be some major issues, such as:

- There is no custom form yet.
- There is no easy way to import and export, including backup.

So further and iterated improvement will remain to be done continuously.

Major

- Can have custom form yet.
- Can easily import and export, even backup.

Others

Account system, more predefined context and field, BREAD the template, more custom configuration, multimedia support, integration with other networks, encryption, etc

THANK YOU