#### Hashtux - SAD Document

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## Contents

1	Intr	roduction	<b>2</b>
	1.1	Vision	2
	1.2	Target audience	2
	1.3	Domain	3
	1.4	Business Cases	3
	1.5	Scope	3
2	Architectural Drivers 4		
	2.1	Functional Requirements	4
	2.2	Quality Requirements	4
		2.2.1 Scenario Analysis	4
	2.3	Constraints	4
	2.4	Tactics	4
		2.4.1 Risks, Tradeoff and Sensitivity Points	4
3	Arc	Architectural Mechanisms	
	3.1	Analysis, Design and Implementation Mechanisms	5
4	Sys	System Characteristics and Challenges	
	4.1	Characteristics	6
	4.2	Challenges	6
5	Use	Case View	7
	5.1	Significant Use Cases (Use Case Diagram and descriptions) .	7
	5.2	Use Cases realization (Sequence State Diagrams)	7
6	Logical View 8		8
	6.1	Presentation Layer	8
	6.2	Services Layer	8
	6.3	Data Layer	8
7	Dep	ployment View	9
Q	R. Data Viou		10

#### Introduction

#### 1.1 Vision

"HashTux is a platform for easy access to multiple social media feeds based on users search where the user has the option to filter information based on his/her preferences."

HashTux is a web-based service that displays the latest pictures, videos and status updates for a given hashtag. Media files and status updates are fetched from multiple social media sources and displayed in a web interface optimized for fullscreen view ideal for a conference or party context, having a screen illustrating the different viewpoints of the chosen keyword subject. As time passes, the different content objects come and go, new ones fade in replacing the old ones. Videos start playing automatically. The objects on the screen are ordered automatically so that all space on the screen is used properly.

There is already successful software that does this for twitter only (Tweet-deck). Our selling point is that in addition to this we want to include content from multiple sources (also including instagram and youtube, but ideally with a modular implementation that easily allows adding more) and also combine it with multiple media formats, including video automatically playing.

If there is a massive amount of content within a short time interval, our application will display the content rated as most popular or from the most trusted sources. To fetch older information we want to include a time scroll functionality.

We use CouchDB as our document-based database. Also, to ensure the system to have a constant up-time even in the case of a failure or maintenance in one or more servers. Our goal is to have the system running on several servers, so that the system will have a constant uptime even though one or more of the servers will be offline or in maintenance.

#### 1.2 Target audience

#### Event and conference hosts.

To easily show the latest multimedia from your event.

#### Social media users.

For the ease of use, fun experience, and the all-in-one solution.

#### General commercial use.

Illustrate recent updates for a product or company name.

#### 1.3 Domain

- $\bullet$  Information
- Social Media
- Trends

Giving internet users information on current trends, news and events on social media.

#### 1.4 Business Cases

#### 1.5 Scope

## **Architectural Drivers**

- 2.1 Functional Requirements
- 2.2 Quality Requirements
- 2.2.1 Scenario Analysis
- 2.3 Constraints
- 2.4 Tactics
- 2.4.1 Risks, Tradeoff and Sensitivity Points

# **Architectural Mechanisms**

3.1 Analysis, Design and Implementation Mechanisms

# System Characteristics and Challenges

#### 4.1 Characteristics

 $[Resource\ Sharing,\ Opennes,\ Cuncurrency,\ Scalability,\ Fault\ Tolerance,\ Transparency]$ 

#### 4.2 Challenges

[Security, Privacy, Performance, Heterogeneity, Integrity, Reliability, Availability]

# Use Case View

- 5.1 Significant Use Cases (Use Case Diagram and descriptions)
- 5.2 Use Cases realization (Sequence State Diagrams)

# Logical View

- 6.1 Presentation Layer
- 6.2 Services Layer
- 6.3 Data Layer

# Deployment View

# Data View