

#### University of Groningen

SOFTWARE PATTERNS TEAM 2

# **Smart Flood Monitoring**

#### Authors

Putra, Guntur Fakambi, Aurélie Schaefers, Joris Menninga, Wouter Friday 11<sup>th</sup> December, 2015

Version 1.0

#### Authors

Name	E-Mail
Putra, Guntur	G.D.Putra@student.rug.nl
Fakambi, Aurélie	A.Fakambi@student.rug.nl
Schaefers, Joris	J.Schaefers@student.rug.nl
Menninga, Wouter	W.G. Menning a@student.rug.nl

### Revision History

Version	Author	Date	Description
0.1	Schaefers	11-12-15	
	Putra	11-12-15	
	Fakambi	11-12-15	
	Menninga	11-12-15	
	Menninga	11-12-15	

### Contents

		i iii iv
1	v	iv
1	Introduction	1
2	System Context	2
3	Stakeholders and Concerns  3.1 Stakeholders	3 3 3
4	Software architecture	4
	4.1 Logical View          4.2 Process View	4
5	5.1.1 Pipes and Filters          5.1.2 Shared Repository          5.1.3	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
6	Evaluation	6
	6.1 Patterns	6 6 6 6
7	Recommendations	7
	7.2 Deprecation of Modules	7 7 7
8	Conclusion8.1 Pattern-Based Architecture Reviews8.2 IDAPO8.3 Final Words	8 8 8
$\mathbf{A}_{\mathbf{I}}$	ppendices	9
٨	Timo Tracking	0

# List of Figures

#### List of Tables

### 1 Introduction

# 2 System Context

- 3 Stakeholders and Concerns
- 3.1 Stakeholders
- 3.2 Negative Stakeholders
- 3.3 Key Drivers

- 4 Software architecture
- 4.1 Logical View
- 4.2 Process View

#### 5 Pattern Documentation

- **5.1** Core
- 5.1.1 Pipes and Filters
- 5.1.2 Shared Repository
- 5.1.3 ...
- 5.2 Modules
- 5.2.1 Interceptor
- 5.2.2 Plugin

#### 6 Evaluation

- 6.1 Patterns
- 6.1.1 Pipes and Filters
- 6.1.2 Shared Repository
- 6.2 Subsystems
- 6.2.1 Core Subsystem
- 6.2.2 Modules Subsystem

### 7 Recommendations

- 7.1 Event-driven
- 7.2 Deprecation of Modules
- 7.3 Virtual Machine

- 8 Conclusion
- 8.1 Pattern-Based Architecture Reviews
- 8.2 IDAPO
- 8.3 Final Words

### A Time Tracking

### Week 1

Person	Task	Hours
Putra		
Fakambi		
Schaefers		
Menninga		

# Bibliography