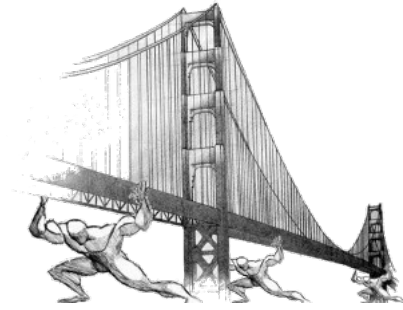


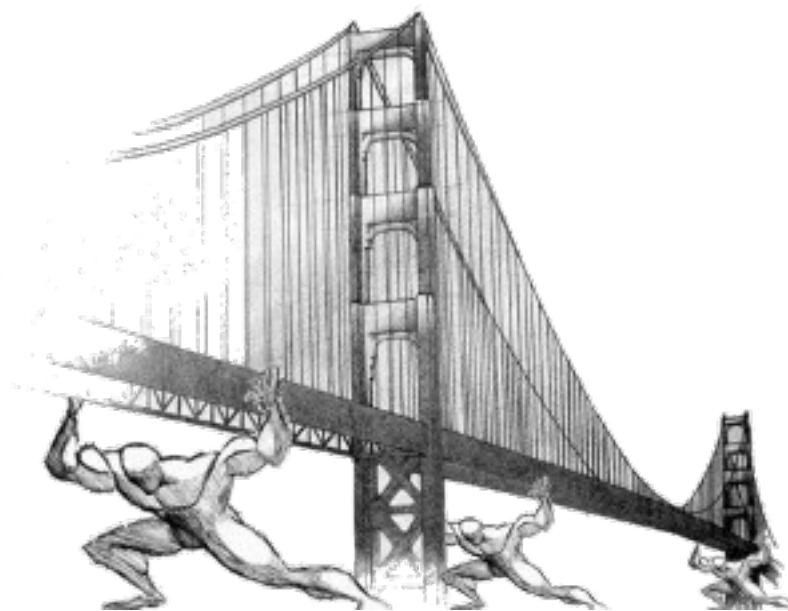
Distributed Software Development

Happy
New
Year

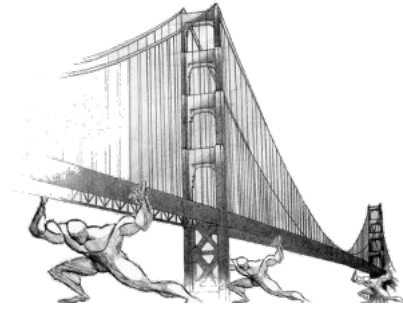
The Development Group



Real-Time Bridge Monitoring Final Presentation

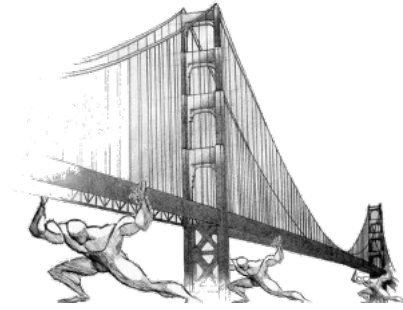


Overview



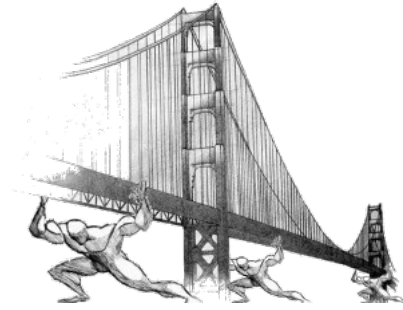
- Team Organization
- Project Work Summary
 - Work hours
 - Timeliness
 - Requirements Fulfilled
 - Github
 - Project Plan Fullfilment

Overview



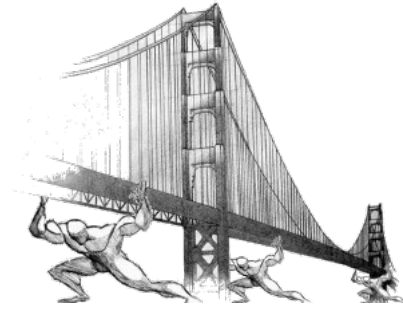
- Distributed Project Experience
 - Communication
 - Meetings
 - Synchronization
 - Time Spent
- Requirements
- Design

Overview



- Verification and Validation
 - Verification and Validation approach
 - Level of Coverage of tests
 - Non-functional requirements coverage testing
- Demo

Team Organization



- The Development Group



Andrea Bottoli (PoliMi)



Lorenzo Pagliari (PoliMi)



Marko Brčić (FER)



Dzana Kujan (MDH)



Jörn Tillmanns (MDH)

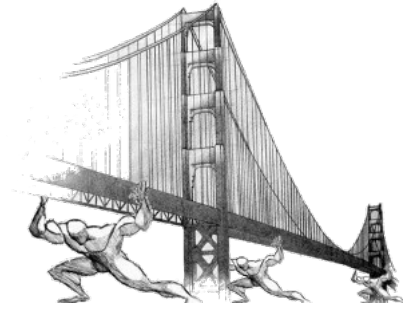


Miraldi Fifo (MDH)



Nikola Radisavljevic (MDH)

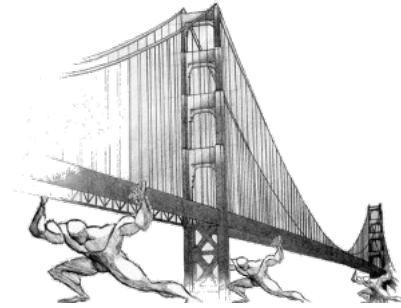
Team Organization



- Roles

Name	Initials	Responsibility (roles)
Andrea Bottoli	AB	Project Manager
<i>Dzana Kujan</i>	<i>DK</i>	<i>Team Leader</i>
Marco Brčić	MB	Documentation Manager
Lorenzo Pagliari	LP	Design Manager
Miraldi Fifo	MF	Testing Manager
Jörn Tillmanns	JT	Database Manager
Nikola Radisavljevic	NR	Integration Manager

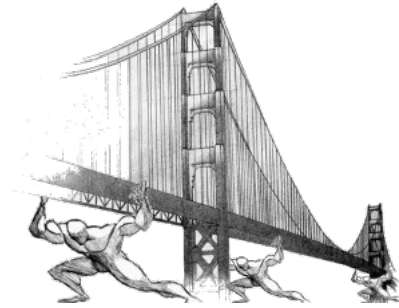
Project Work Summary



- Work Hours

Member	W42	W43	W44	W45	W46	W47	W48	W49	W50	W51	W52	W01	Total
Andrea Bottoli	11	40	50	45	47	68	40	41	14	53	7	8	424
Lorenzo Pagliari	10	37	53	51	46	57	37	51	43	54	10	26	475
Dzana Kujan	9	36	43	36	27	36	27	49	24	17	2	5	311
Marko Brcic	11	40	54	60	28	36	26	15	15	15	11	4	315
Jorn Tillmanns	9	37	51	43	20	13	39	16	15	22	18	12	295
Nikola Radisavljevic	9	37	45	36	26	35	26	46	25	17	12	7	321
Miraldi Fifo	9	38	45	35	16	28	14	18	18	13	12	10	256
Ghazaleh Shojaee	-	-	53	13	32	26	-	-	-	-	-	-	124
Total	68	265	394	319	242	299	209	236	154	191	72	72	2521

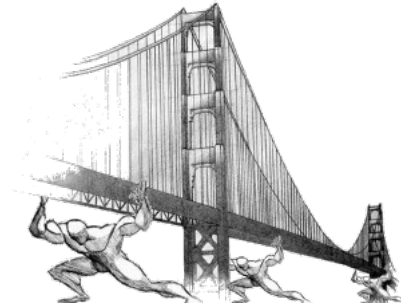
Project Work Summary



- Timeliness
 - Milestones

Id	Milestone Description	Responsible Dept./Initials	Finished week			
			Plan	Forecast Week	+/-	Actual
M-001	Project Plan & Vision	All	42	42	0	43
M-002	Requirements gathering	All	43	43	0	43
M-003	Requirements document	All	43	44	1	43
M-004	System Design	All	43	44	0	43
M-005	Requirement Document	All	44	44	0	44
M-006	Design Document	All	44	44	0	44
M-007	Status Report	All	44	44	0	44
M-008	Organize Repository	Marko Brcic	45	45	0	45
M-009	Team Policies	Marko Brcic	45	45	0	45
M-010	Share telephone number	All	45	45	0	45

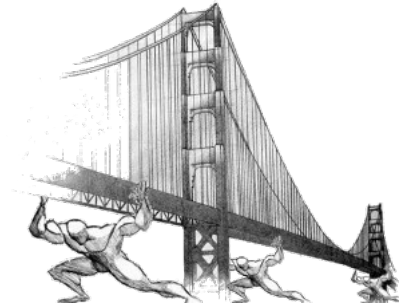
Project Work Summary



- Timeliness
 - Milestones

Id	Milestone Description	Responsible Dept./Initials	Finished week			
			Plan	Forecast Week	+/-	Actual
M-011	Modify Requirement Doc	Dzana Kujan	45	46	1	45
M-012	Modify Design Doc	Lorenzo Pagliari	45	46	1	45
M-013	Setup tools on PC	All	45	45	0	45
M-014	Change DB	Jorn Tillmanns	45	45	0	45
M-015	Implementation Parser	Jorn Tillmanns	45	45	0	45
M-016	Implementation DAO	Jorn Tillmanns	45	45	0	45
M-017	Start Implementation Math	Andrea Bottoli	45	46	1	45
M-018	Test Parser	Miraldi Fifo	46	47	0	46
M-019	Test Classes alpha prot.	Miraldi Fifo	46	47	0	46
M-020	Alpha prototype	All	46	48	2	46

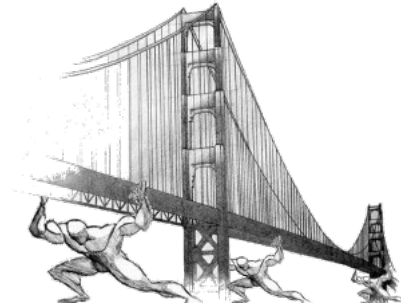
Project Work Summary



- Timeliness
 - Milestones

Id	Milestone Description	Responsible Dept./Initials	Finished week			
			Plan	Forecast Week	+/-	Actual
M-021	Requirements Gathering	Andrea Bottoli	47	47	0	47
M-022	Update Design Doc.	Andrea Bottoli	47	48	0	48
M-023	Update Requirem. Doc.	Dzana Kujan	47	48	0	48
M-024	Finalize Math Engine	Lorenzo Pagliari	48	49	1	48
M-025	Web Design	Miraldi Fifo	48	49	1	48
M-026	Status Report	All	49	49	0	48
M-027	UserLoginSystem	Jorn Tillmanns	49	50	1	48
M-028	Finalize Math Engine	Lorenzo Pagliari	49	50	0	49
M-029	Junit tests v1	Miraldi Fifo	49	50	0	49
M-030	Web Site Mockups	Nikola Radisavljevic	49	49	0	49

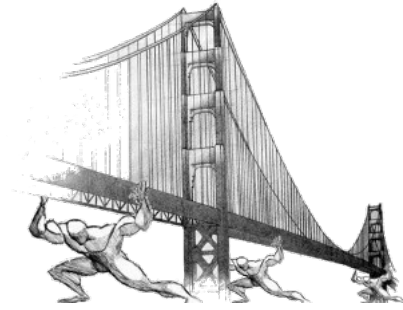
Project Work Summary



- Timeliness
 - Milestones

Id	Milestone Description	Responsible Dept./Initials	Finished week			
			Plan	Forecast Week	+/-	Actual
M-031	Web Site Graphs	Dzana Kujan	49	50	0	49
M-032	Beta Prototype	All	50	51	0	50
M-033	Beta Prototype pres.	Lorenzo Pagliari	51	51	0	51
M-034	Technical documentation	Andrea Bottoli	51	51	0	51
M-035	Acceptance Test Plan	Miraldi Fifo	51	52	0	52
M-036	Test Report	Miraldi Fifo	01	02	1	52
M-037	Final Presentation	All	02	02	0	01
M-038	Final Documentation	All	02	03	1	01
M-039	Final Product	All	02	03	1	01
M-040	Final Questionnaire	All	02	03	1	01

Project Work Summary

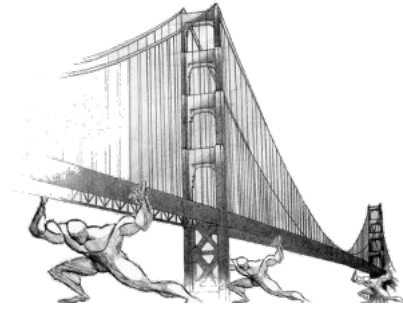


- Timeliness

- Deliverables

- Project Plan
 - Design Description
 - Requirements Specification
 - Project Reports
 - Test Specification
 - Acceptance Test
 - Test Report
 - Final Documentations

Project Work Summary



- Github
 - Info

GitHub repository interface for **andrea-bottoli / DSD**.

Repository statistics: 828 commits, 1 branch, 0 releases, 8 contributors.

Branch: **master** | **DSD** / +

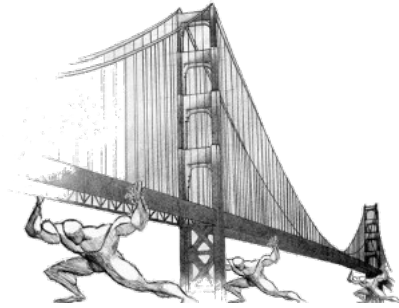
Test Report

miraldi10 authored just now | latest commit ae9c40f813

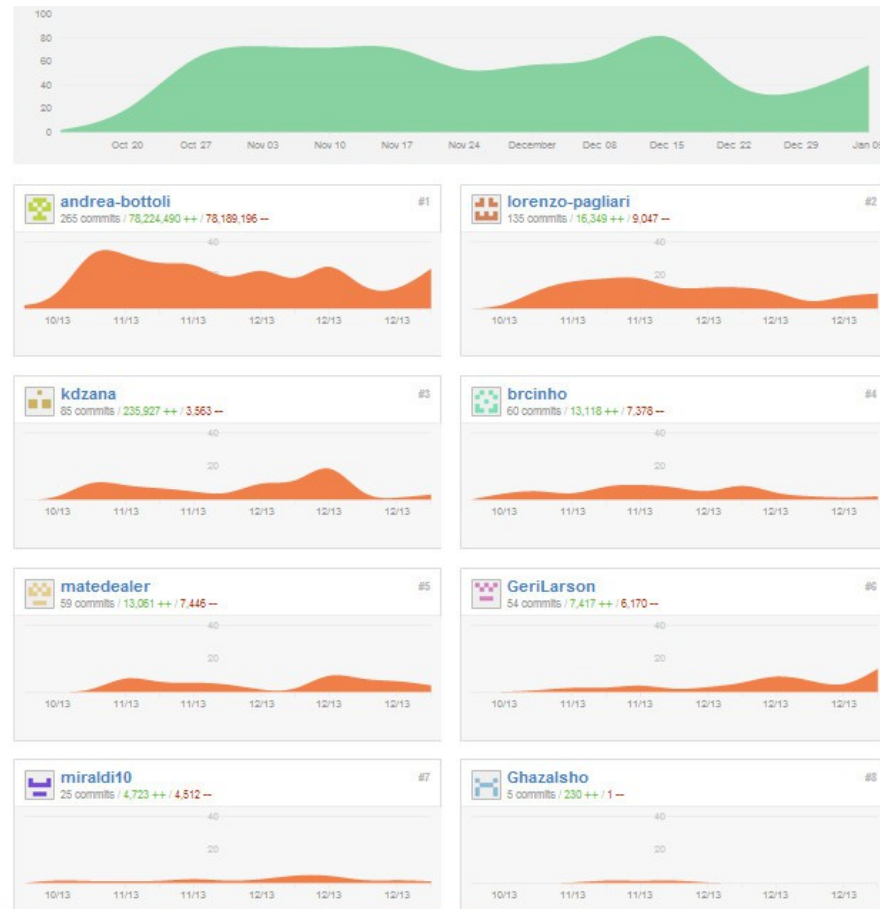
Code	Merge branch 'master' of github.com:andrea-bottoli/DSD	25 minutes ago
Documentation	Test Report	just now
Other	fix	4 days ago
.gitattributes	First set up	3 months ago

Right sidebar links: Code, Issues (14), Pull Requests (0), Wiki, Pulse, Graphs, Network.

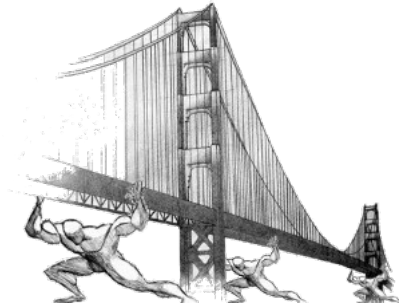
Project Work Summary



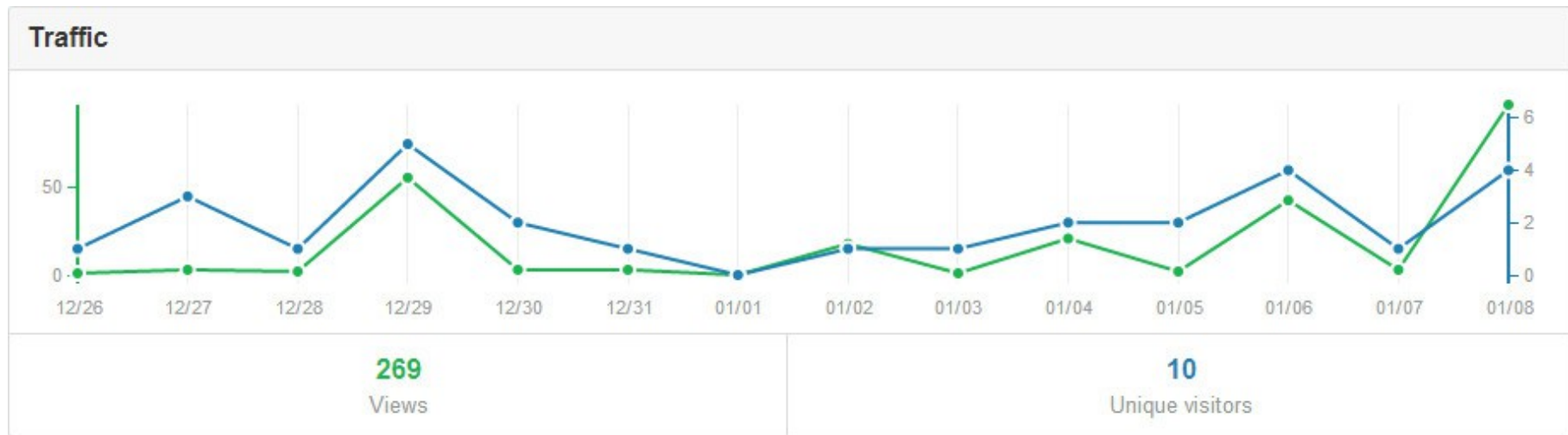
- Github
 - Contributions



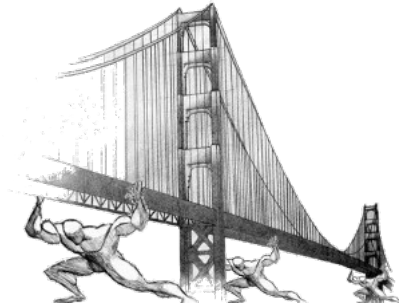
Project Work Summary



- Github
 - Traffic



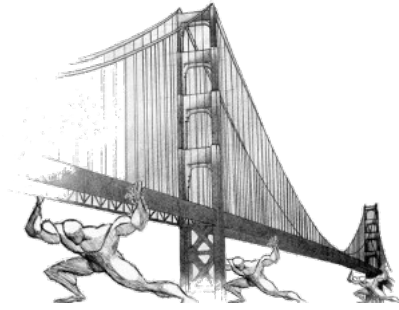
Project Work Summary



- Github
 - Issues

<input type="checkbox"/>	Close	Label ▾	Assignee ▾	Milestone ▾	
<input type="checkbox"/>	!	Finalize Requirement Document 28/12/2013	documentation		#193
		Opened by andrea-bottoli 19 days ago			
<input type="checkbox"/>	!	Finalize Design Document 28/12/2013	documentation		#192
		Opened by andrea-bottoli 19 days ago			
<input type="checkbox"/>	!	Fix Statistics page 27/12/2013	bugs implementation		#187
		Opened by andrea-bottoli 19 days ago			
<input type="checkbox"/>	!	Fix home page (description + names) 27/12/2013	bugs implementation		#186
		Opened by andrea-bottoli 19 days ago			
<input type="checkbox"/>	!	Fix labels & measure units 27/12/2013	bugs implementation		#185
		Opened by andrea-bottoli 19 days ago			
<input type="checkbox"/>	!	M-N Domain graph 27/12/2013	implementation		#184
		Opened by andrea-bottoli 19 days ago			
<input type="checkbox"/>	!	Stretched Images 27/12/2013	bugs implementation		#183
		Opened by andrea-bottoli 19 days ago			
<input type="checkbox"/>	!	Final Project Report v1.1 27/12/2013	documentation		#179
		Opened by andrea-bottoli 19 days ago			
<input type="checkbox"/>	!	Installation Guide v1.1 27/12/2013	documentation		#178
		Opened by andrea-bottoli 19 days ago			
<input type="checkbox"/>	!	User Guide v1.1 27/12/2013	documentation		#177
		Opened by andrea-bottoli 19 days ago			

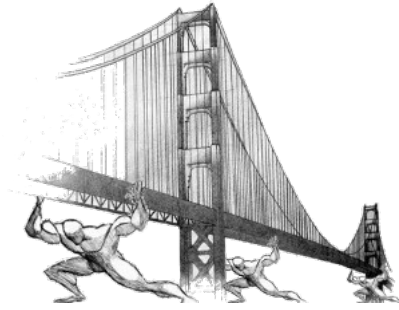
Project Work Summary



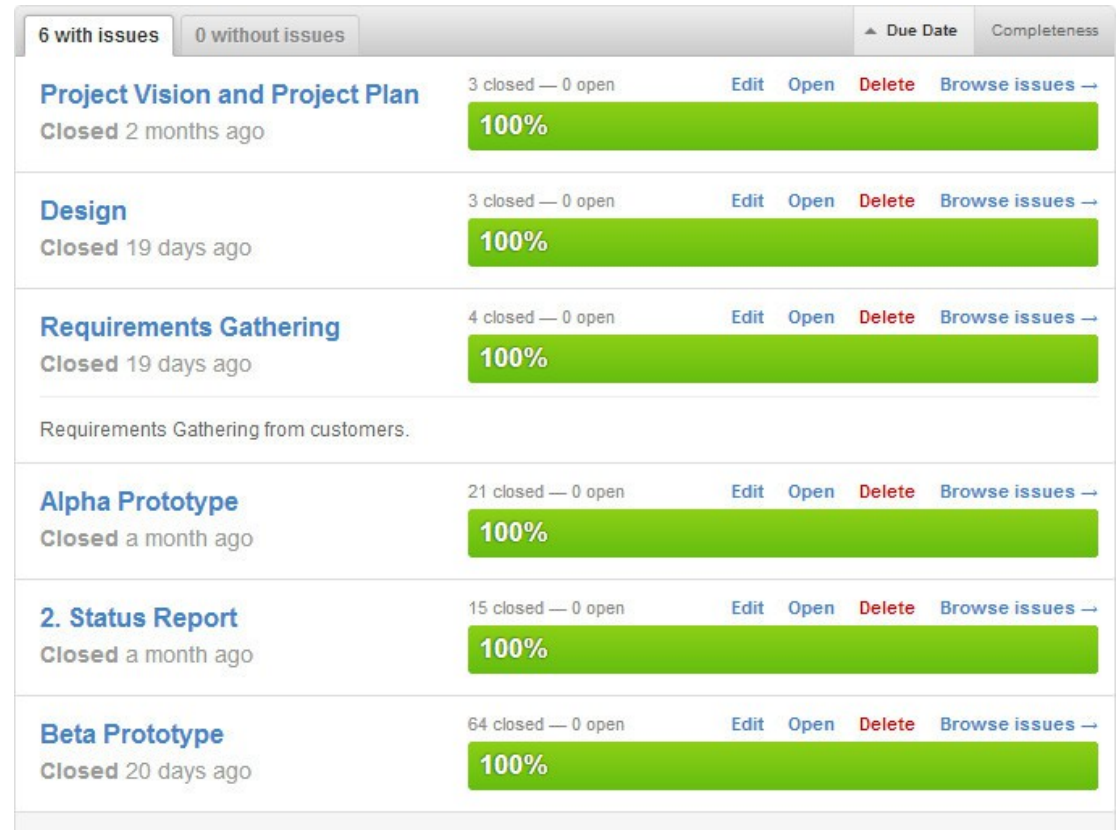
- Github
 - Commit Activity



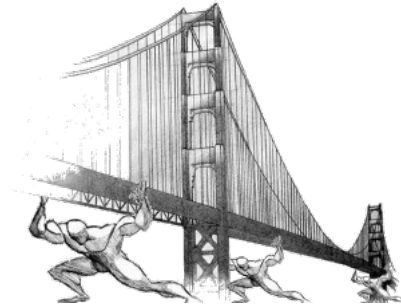
Project Work Summary



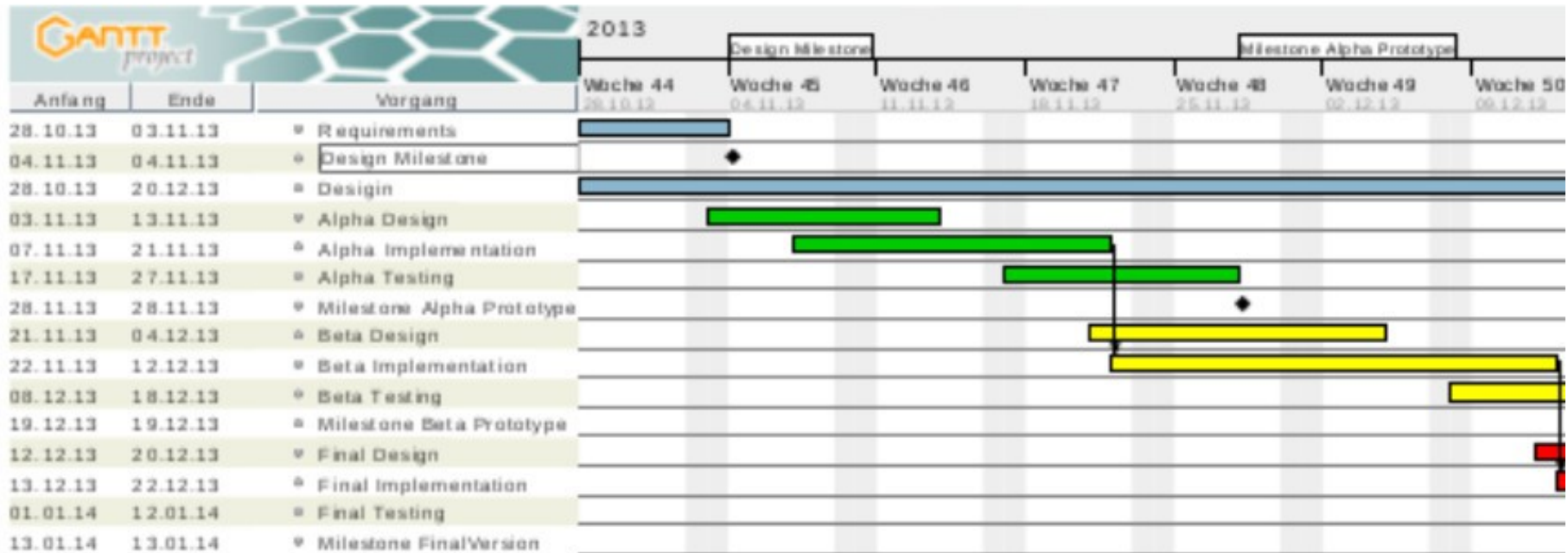
- Github
 - Milestones



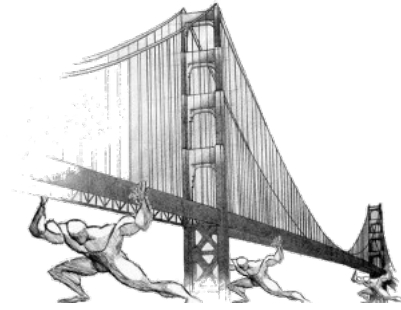
Project Work Summary



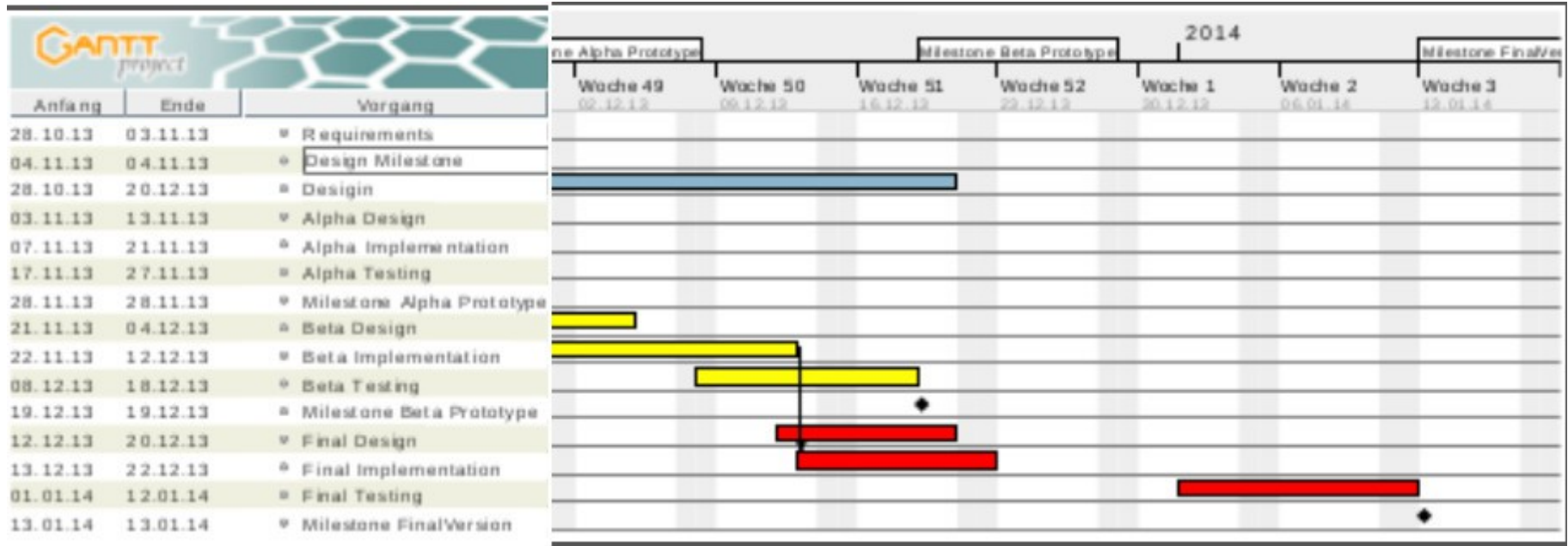
- Project Plan Fullfillment
 - More or less we finished everything
 - Just to finalize some document



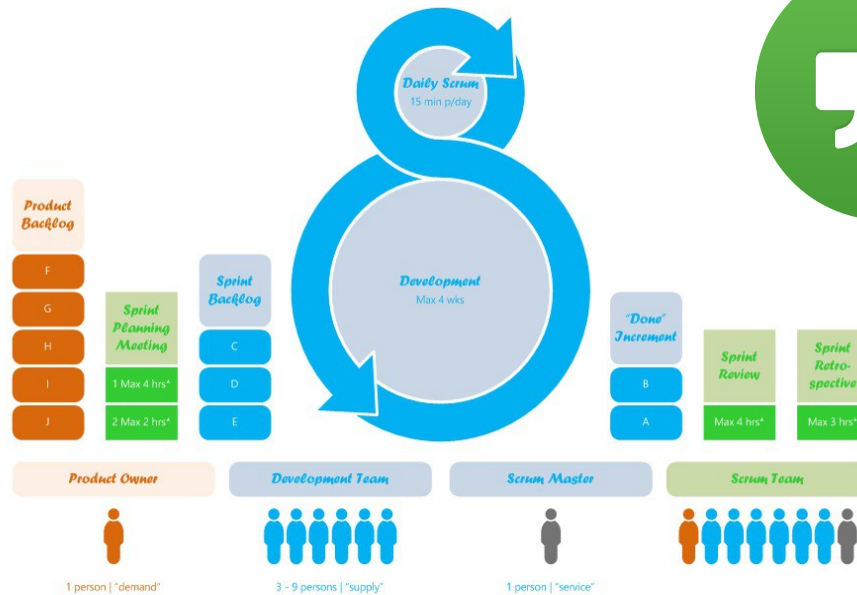
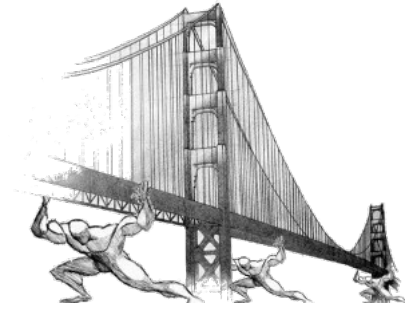
Project Work Summary



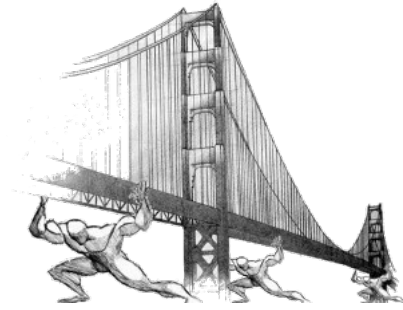
- Project Plan Fullfillment
 - More or less we finished everything
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Distributed Project Experience



Distributed Project Experience



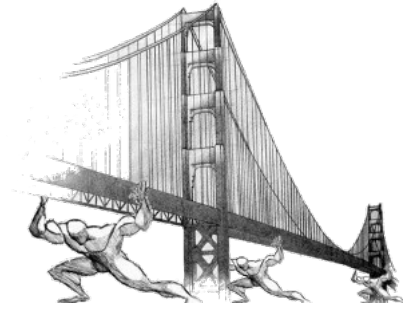
- Meetings

- Both chat & video
- Group Meetings



- Face to face meetings
- Formally scheduled every Monday and Thursday
- Chat used everyday by each member of the group
- Project Leader & Team Leader Meetings
 - About every day (during the week)
 - Formally scheduled every Tuesday

Distributed Project Experience



- Meetings

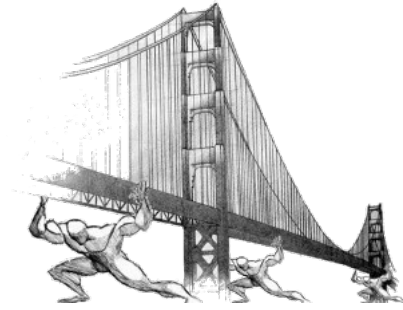
- Customers Meetings

- One every week
 - First one with both customers
 - The others with ing. Crotti

- Supervisors Meetings

- One every week
 - Inform about: project status, group status & managing
 - Report about customer meetings
 - Gather advices, suggestions and proposals
 - Report problems

Distributed Project Experience



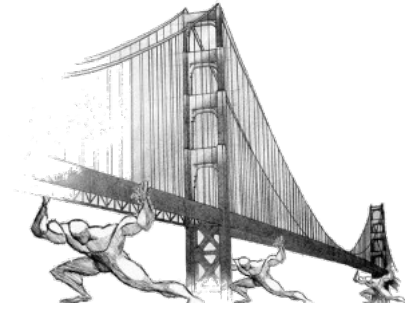
- Synchronization
 - Group Meetings
 - Skype chats
 - Github issues
 - Minutes of Meeting
 - Sharing Documents
 - Fixes summary
 - Customers/Supervisors Meeting Summaries

Requirements



- Local and Remote interface using the web
- Different views depending on the role of the user
- Math Engine that does all the structural calculations
- A DB that contains all the data in a structured way
- Real-Time Monitoring of the status of the bridge

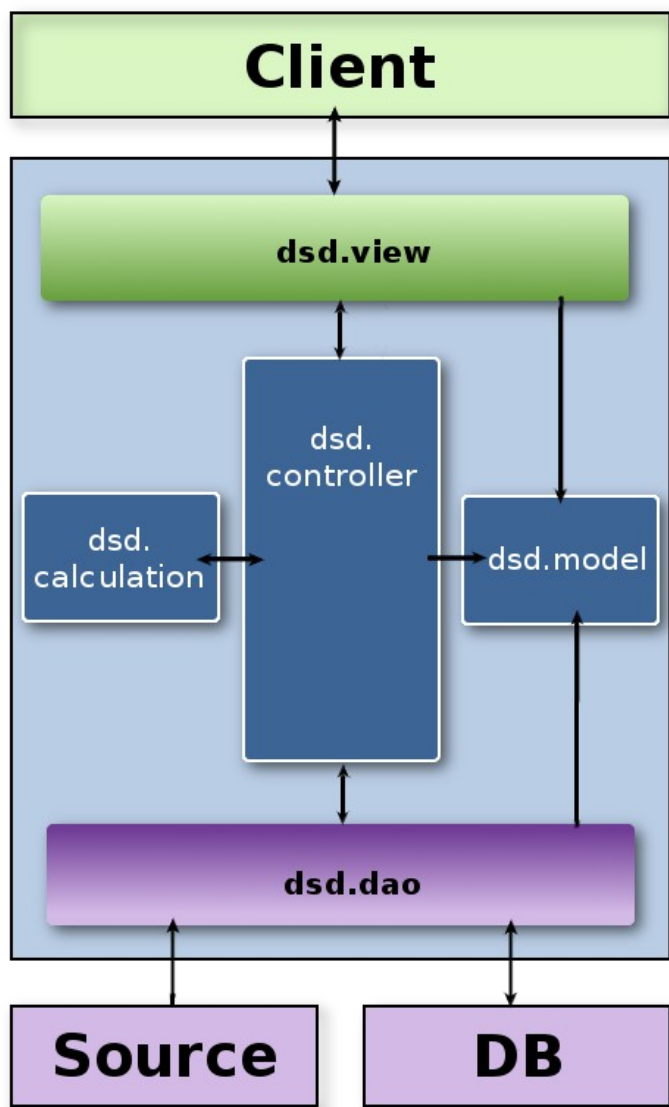
Requirements



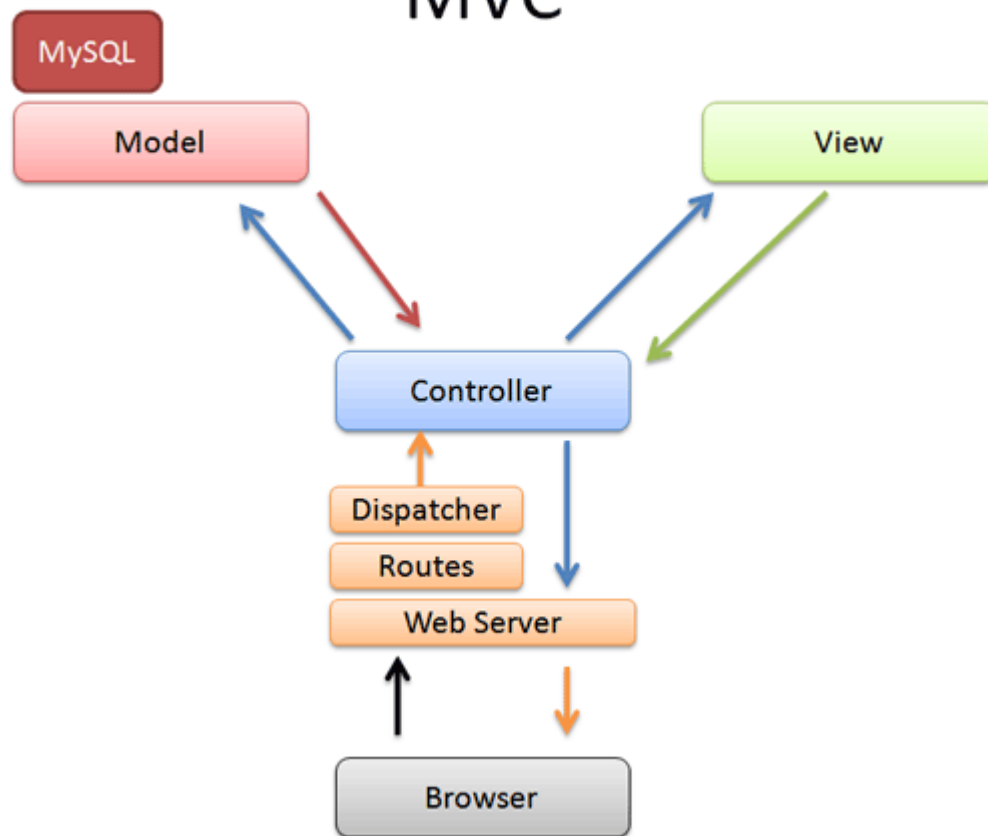
- Conform on
 - EU 305/2011
 - NTC 08
- MN Domain
- Send Alarm (e-mail) to the engineer in charge to manage the possible crisis
- Possibility to change some parameter to change the structural model
- Possibility to add/edit/delete users



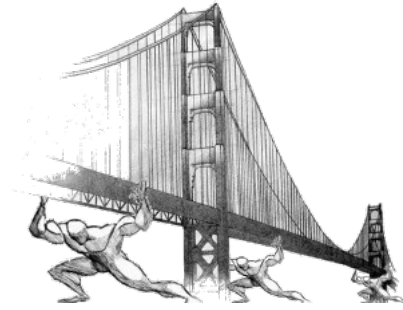
Design



MVC

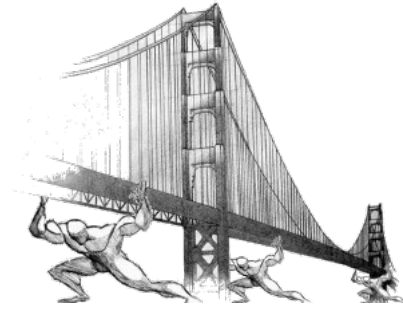


Verification&Validation



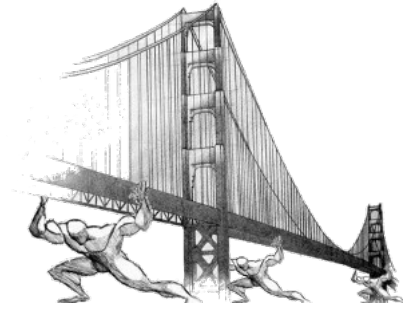
- Approach

Verification&Validation



- Coverage

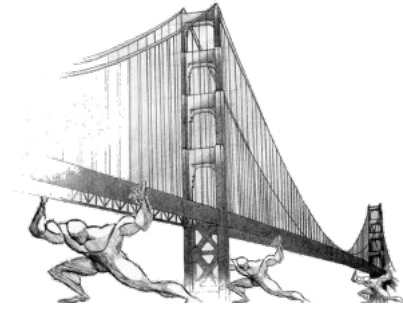
Verification&Validation



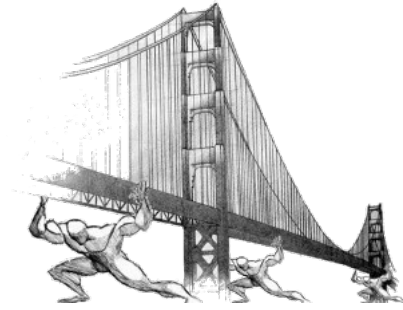
- Non-Functional Coverage

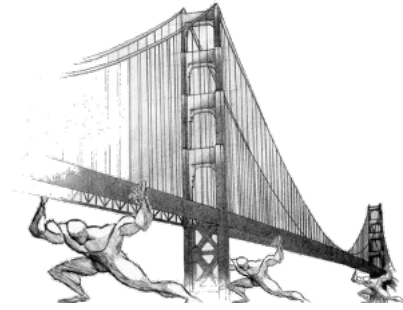
DEMO

- 161.53.67.134/BridgeMonitoring/



Question Time





Thank you for your attention
and Good Luck for the Future!

