

# Distributed Software Development



13-12-02



1

MÄLARDALENS HÖGSKOLA



The Development Group

# Real-Time Bridge Monitoring Status Report 2



# Overview



- Team Organization
  - The Development Group
  - Roles
- Project Status
  - Actual Project Plan
  - Actual Architecture
  - Package Dependencies

# Overview



- Meetings
  - Group meetings
  - Customer meetings
  - Supervisor meetings
- Experiences
  - Effort
  - Problems and solutions
  - Positive experiences
- The web site

# Team Organization



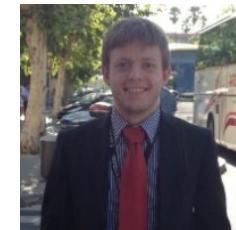
- The Development Group



Andrea Bottoli (PoliMi)



Lorenzo Pagliari (PoliMi)



Marko Brčić (FER)



Dzana Kujan (MDH)



Jörn Tillmanns (MDH)



Miraldi Fifo (MDH)



Nikola Radisavljevic (MDH)

# Team Organization

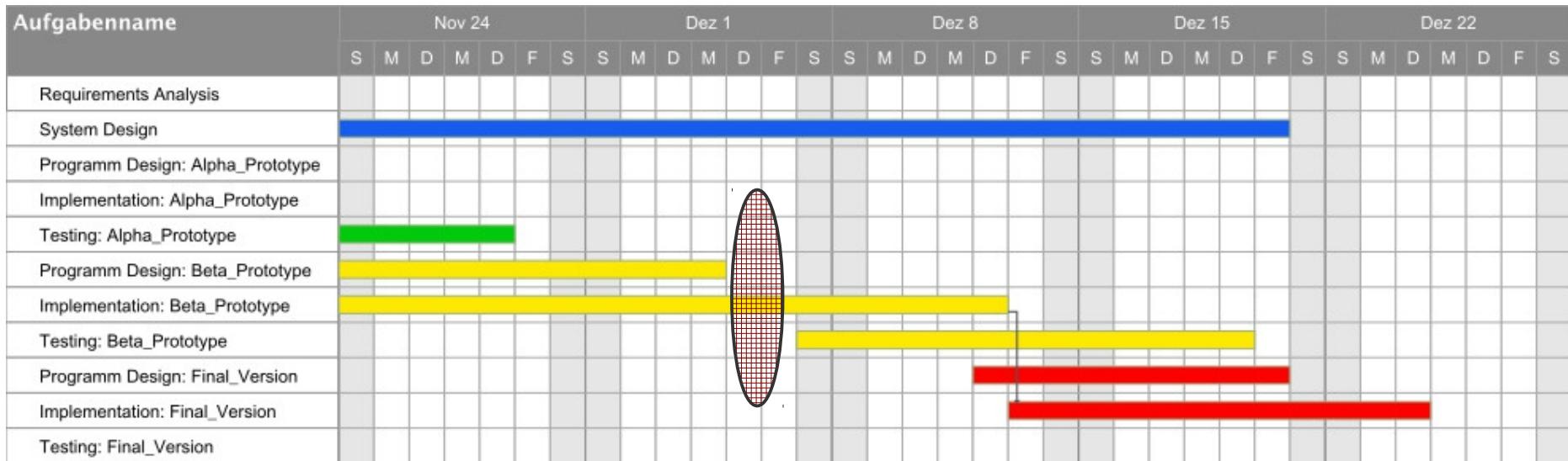


- Roles

| Name                  | Initials  | Responsibility (roles) |
|-----------------------|-----------|------------------------|
| <b>Andrea Bottoli</b> | <b>AB</b> | <b>Project Manager</b> |
| <b>Dzana Kujan</b>    | <b>DK</b> | <b>Team Leader</b>     |
| 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 Status

- Actual Project Plan (I)
  - Where we are and what we have to do





# Project Status

- Actual Project Plan (II)

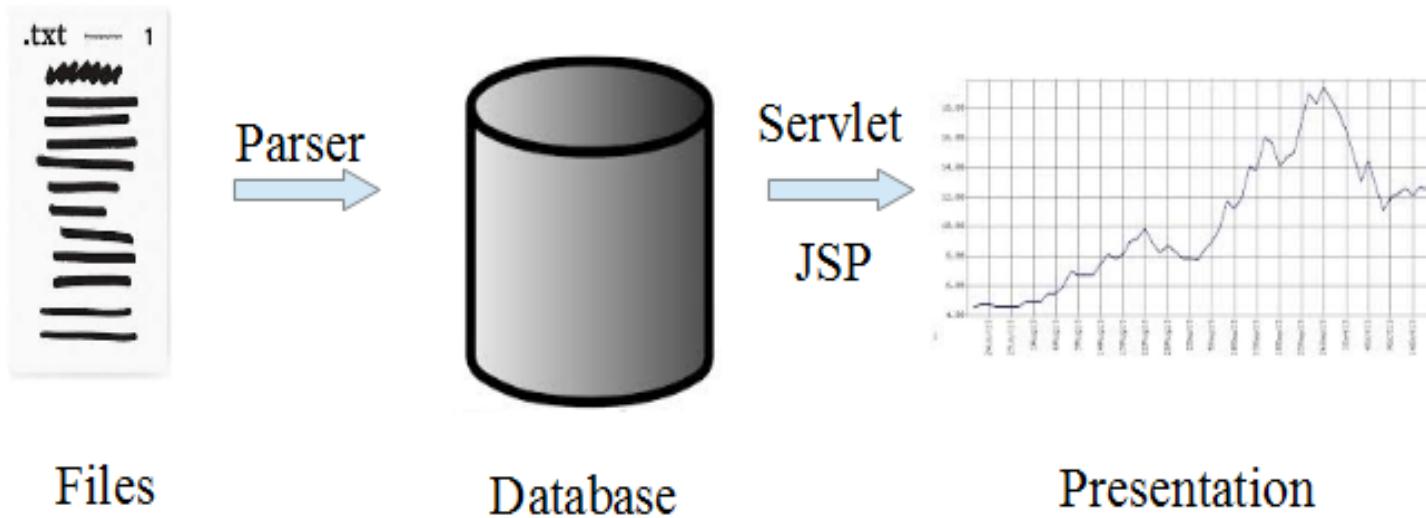
- Alpha Prototype

- Database implementation
    - Scheduler: periodically calls the parser
    - Parser: parses the .txt files and stores in database
    - Webpages
    - Website is running on the VM
    - Acceptance test



# Project Status

- Actual Project Plan (II)
  - Alpha Prototype

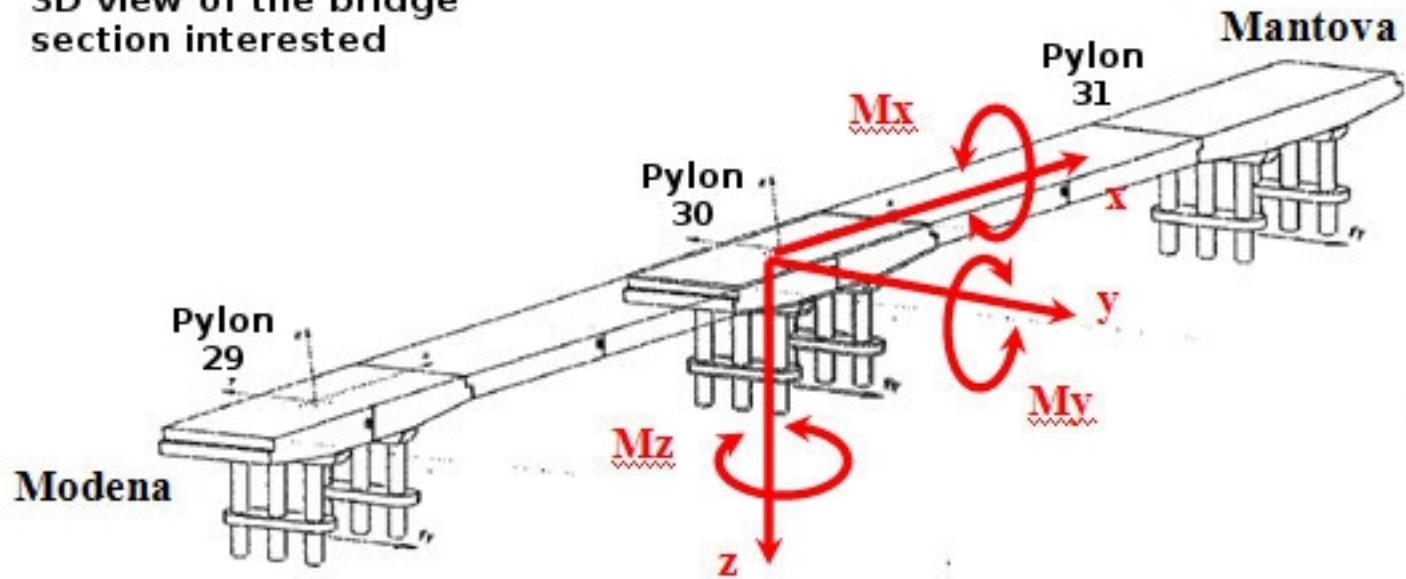




# Project Status

- Actual Project Plan (III)
  - Beta Prototype

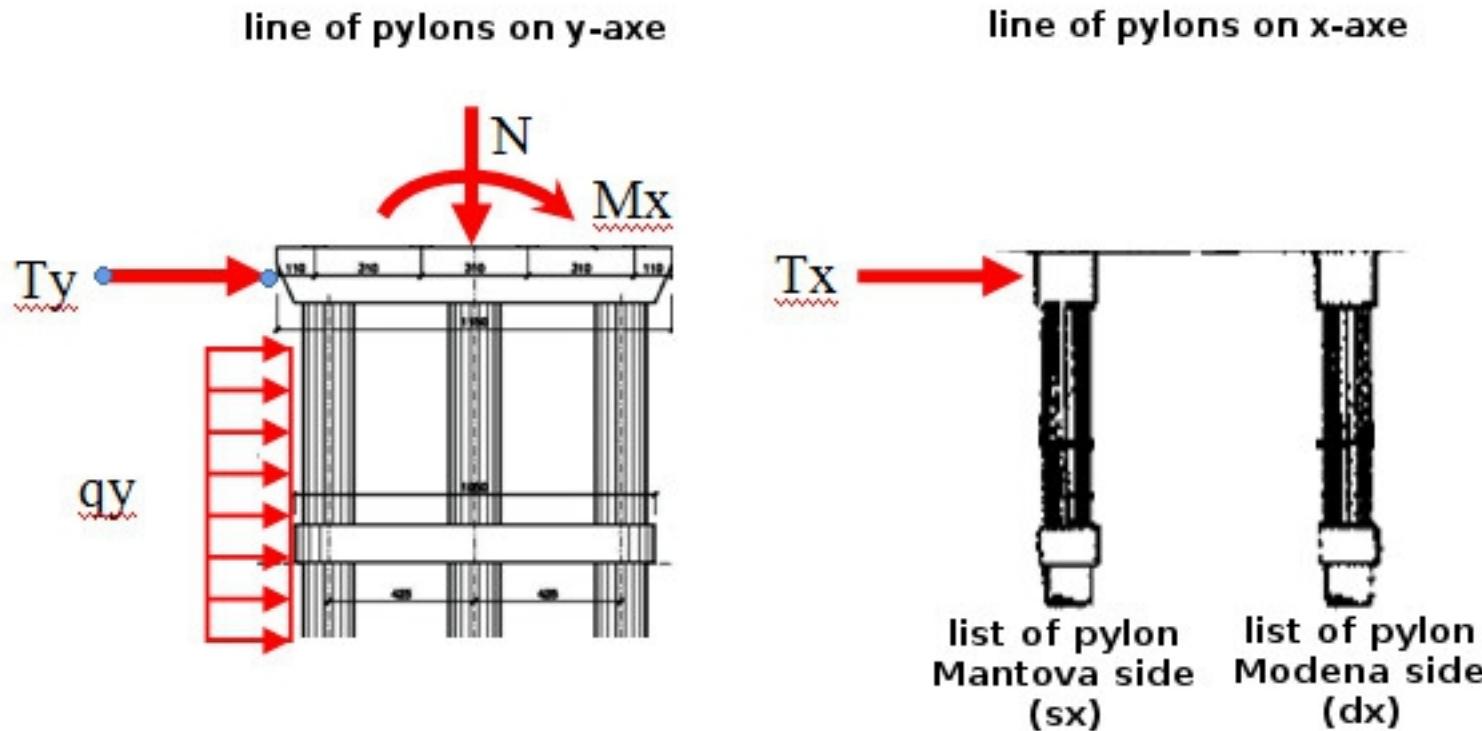
3D view of the bridge section interested





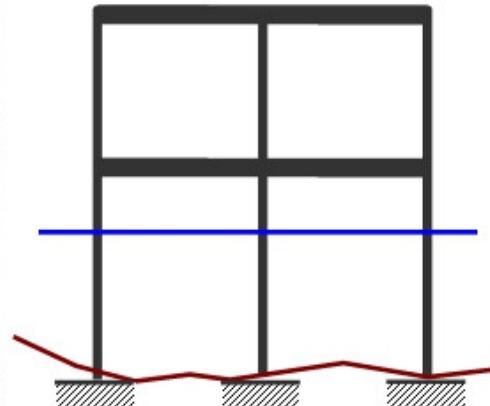
# Project Status

- Actual Project Plan (III)
  - Beta Prototype



# Project Status

- Actual Project Plan (III)
  - Beta Prototype



Stack 31



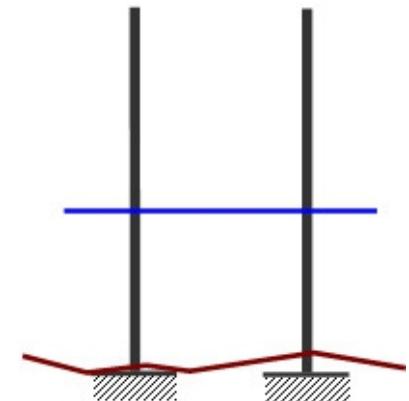
Stack 30



Mantova side  
left

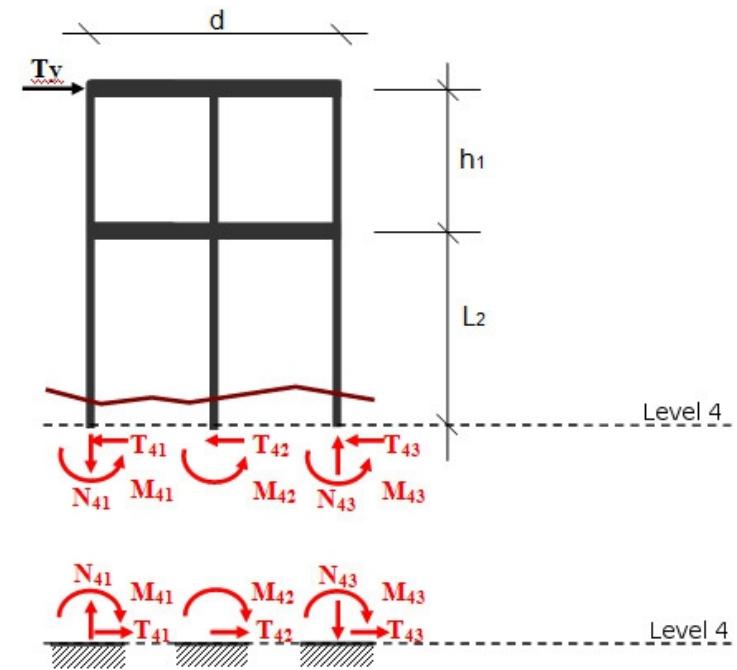
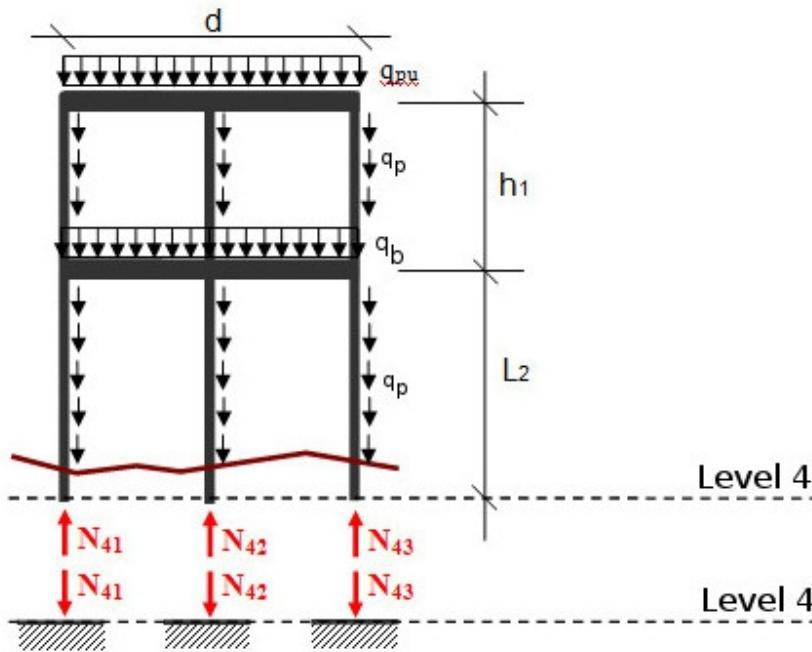


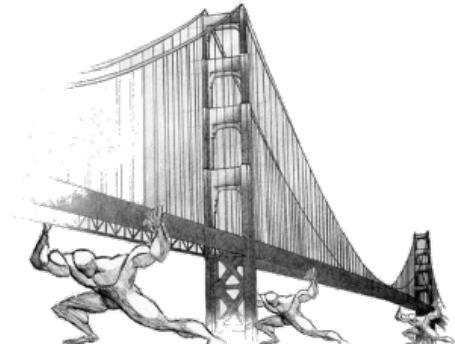
Stack 29



# Project Status

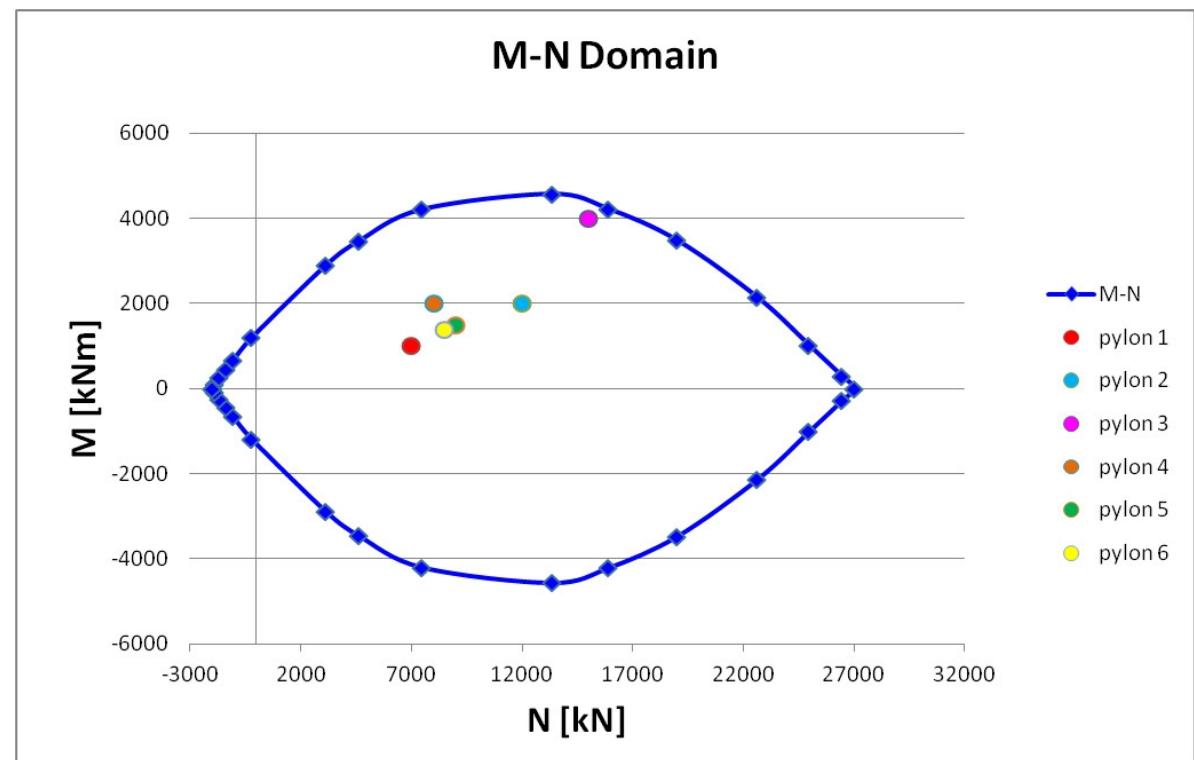
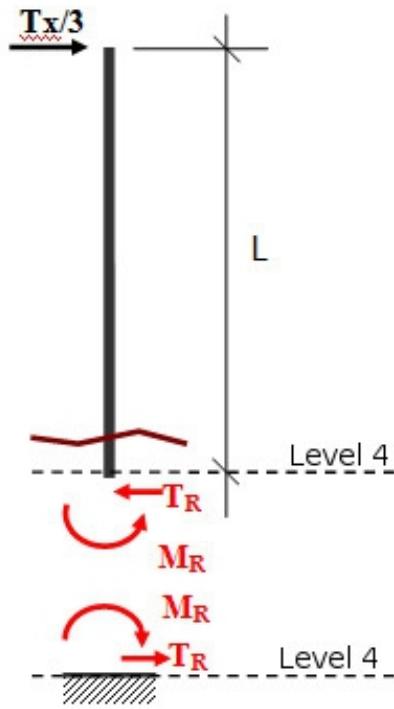
- Actual Project Plan (III)
  - Beta Prototype





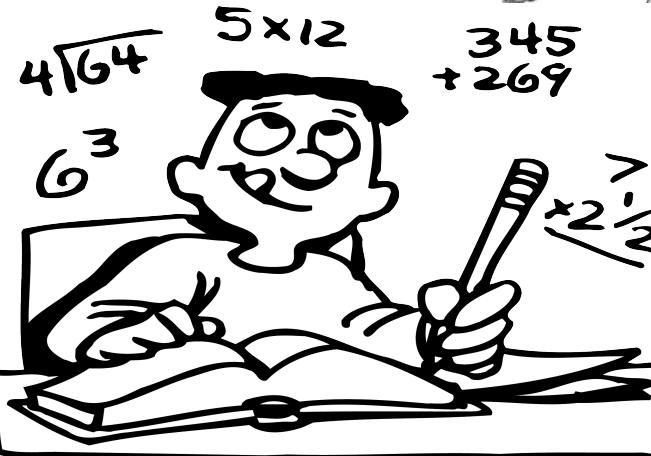
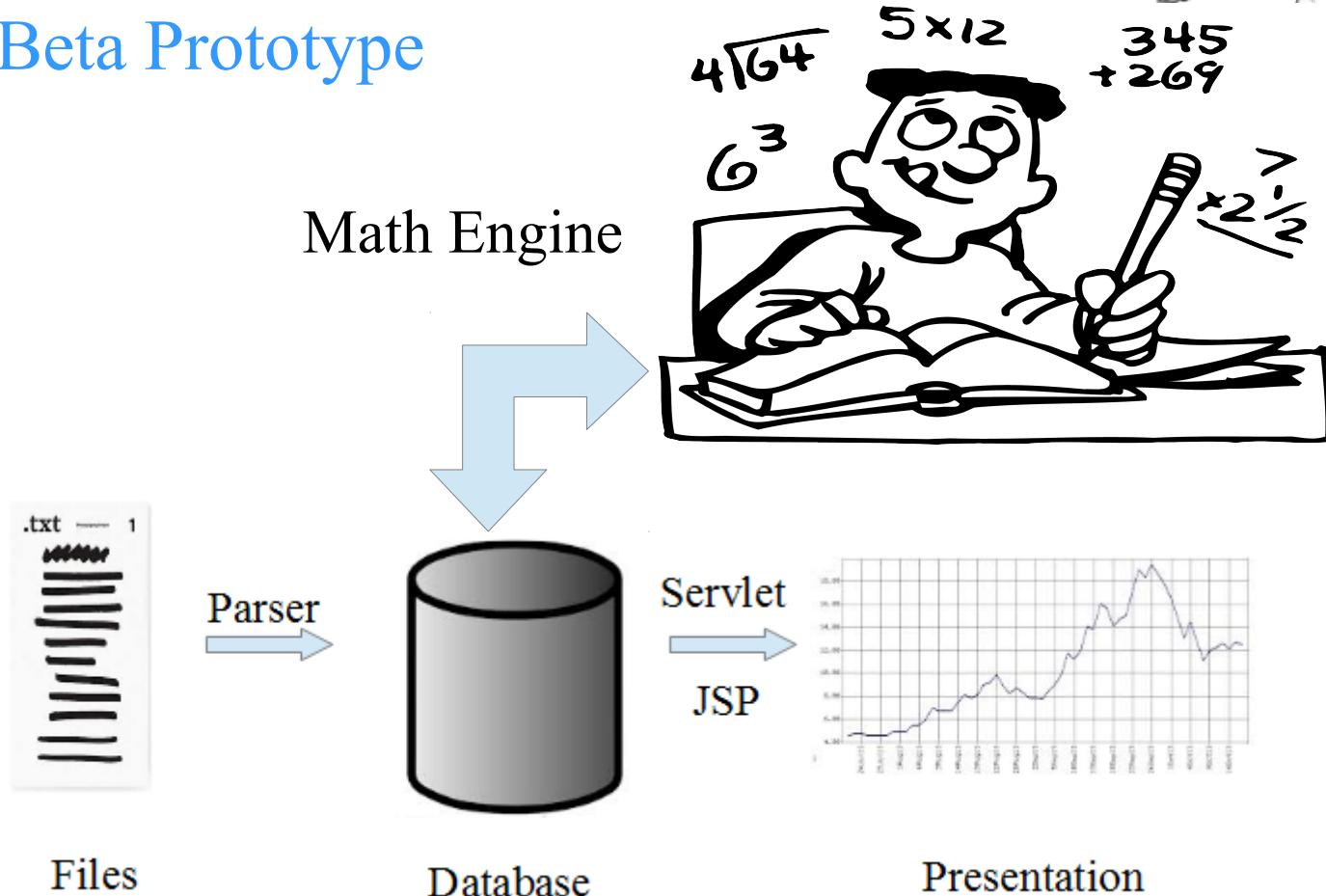
# Project Status

- Actual Project Plan (III)
  - Beta Prototype



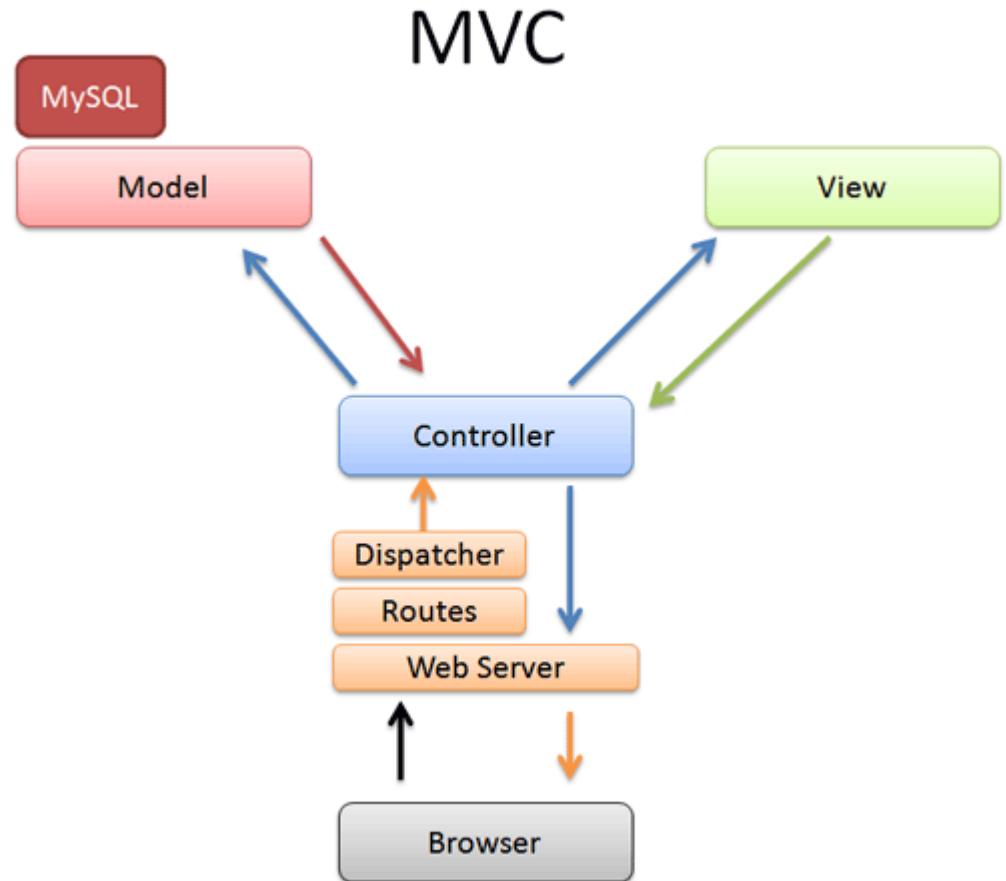
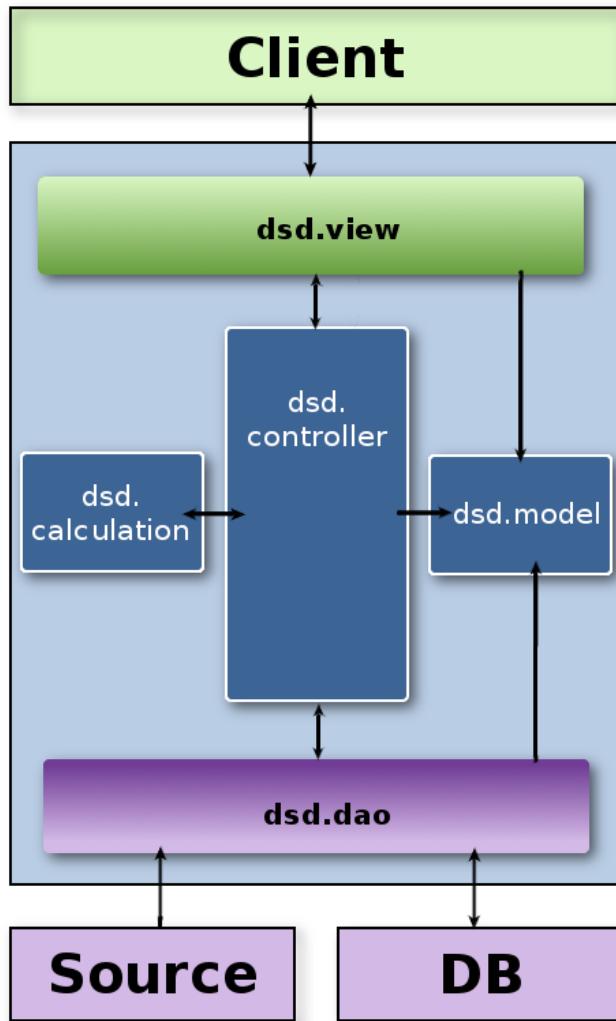
# Project Status

- Actual Project Plan (III)
  - Beta Prototype



# Project Status

- Actual Architecture



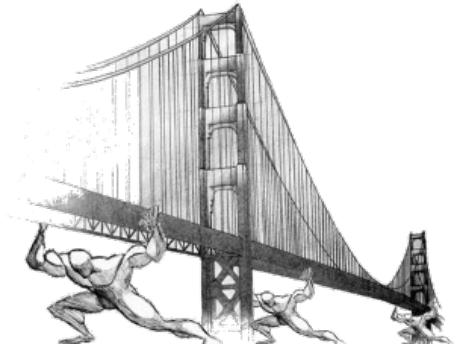
# Project Status

- Actual Architecture

- Modules distribution (persons in charge)

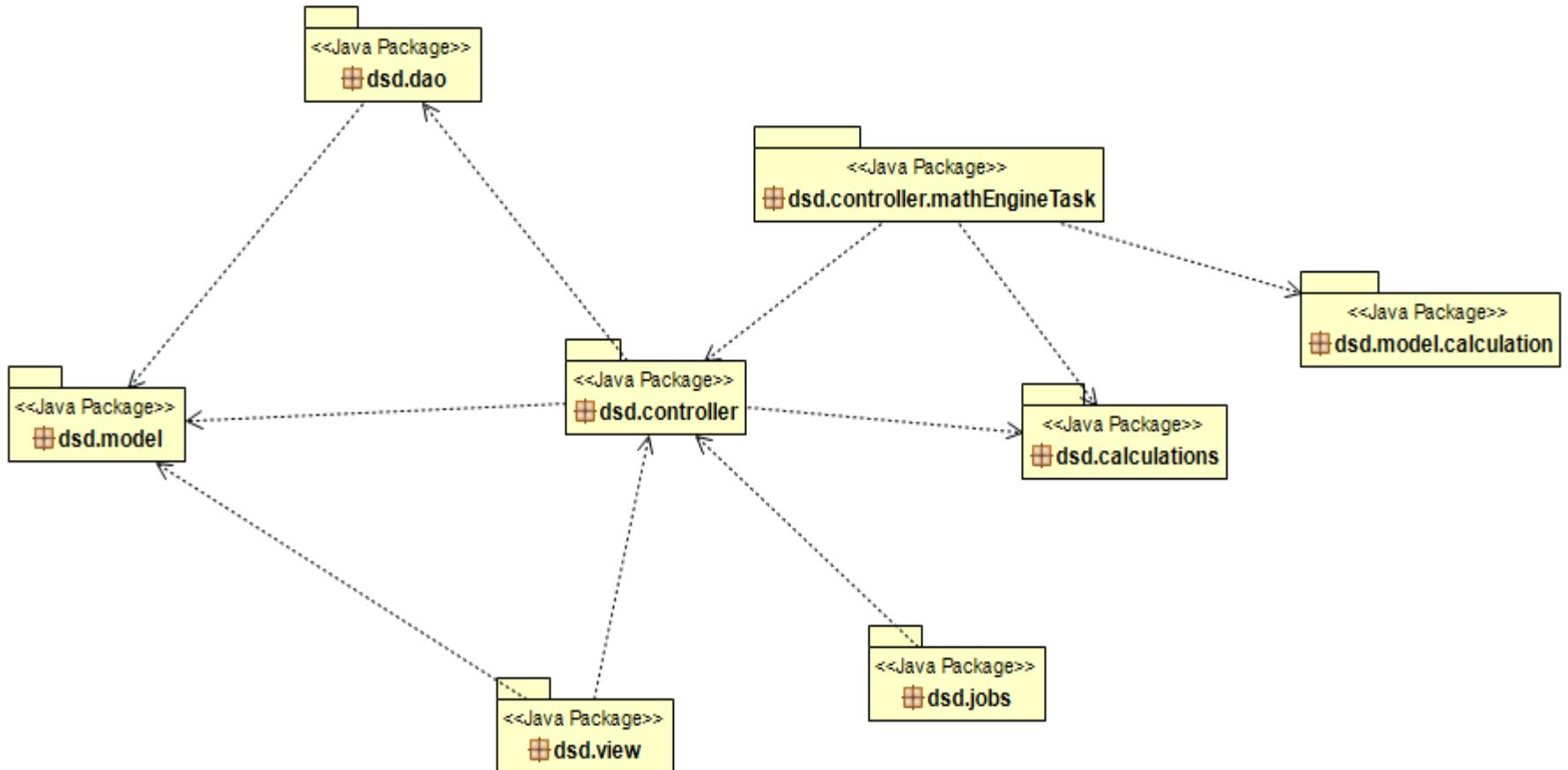
- dsd.dao
      - Marco Brčić and Jörn Tillmanns
    - dsd.controller
      - Each member creates what he needs
    - dsd.model
      - Each member creates what he needs
    - dsd.calculation
      - Lorenzo Pagliari and Andrea Bottoli
    - dsd.view
      - Dzana Kujan, Nikola Radisavljevic





# Project Status

- Package Dependencies



# 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



# Meetings



- Customers Meetings
  - One every week
    - Project status
    - Customers desires
    - Requirements
  - First one with both customers
    - Ing. Francesco Ballio
    - Ing. Gianluca Crotti
  - The others with ing. Crotti

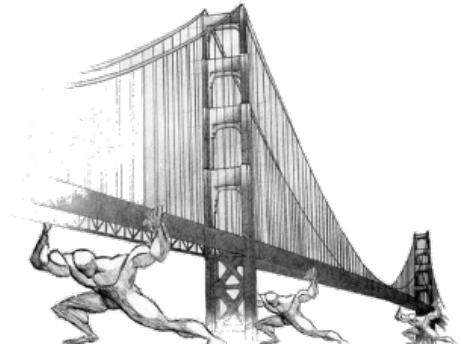
# Meetings

- Supervisors Meetings
  - One every week
  - Inform about
    - Project status
    - Group status & managing
    - Report about customer meetings
  - Gather advices, suggestions and proposals
  - Report problems



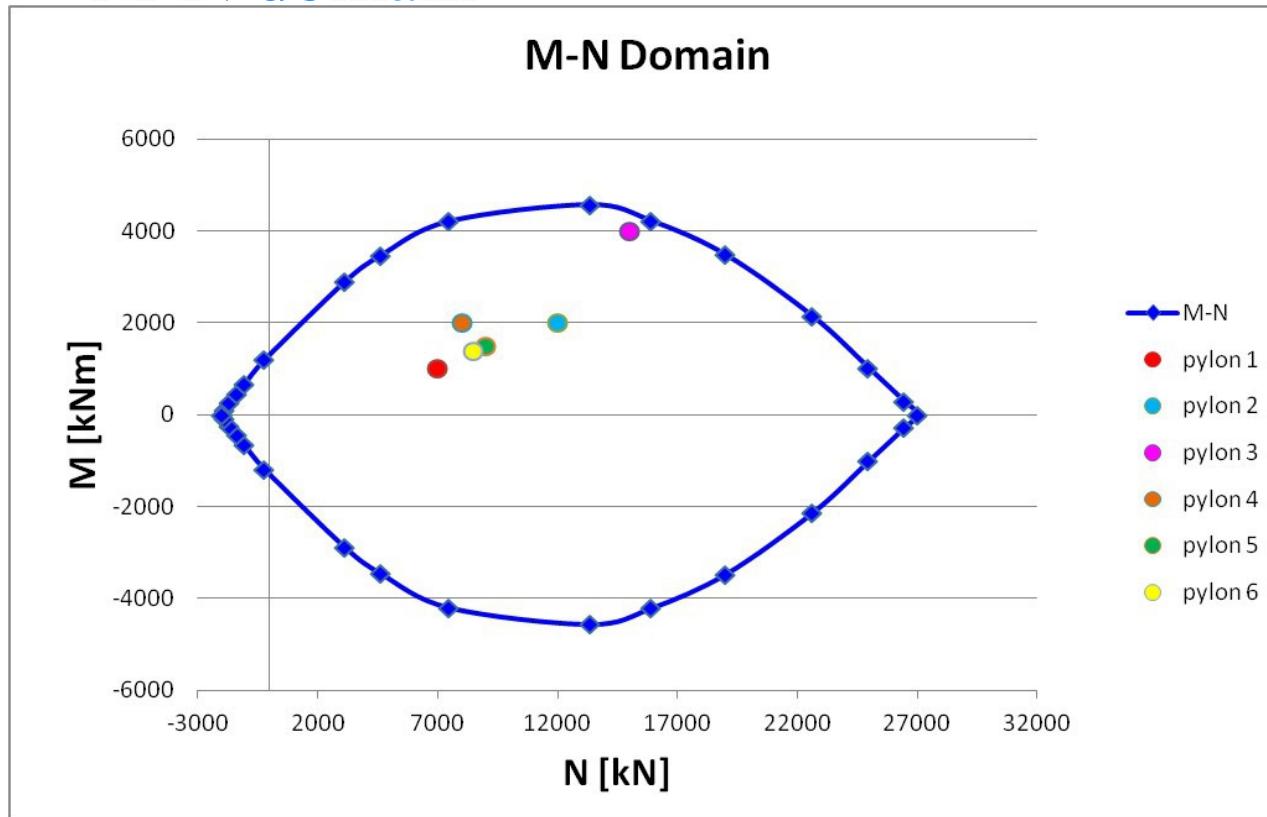
# Experiences

- Effort
  - << table from summary week report >>



# Experiences

- New Requirements
  - M-N domain



# Experiences



- New Requirements
  - Conform to NTC 2008 and EU 305/2011
    - Technical Standards for Constructions
    - Law in Italy to conform to the European Directive EU 305/2011
    - Part of European Directive 86/106/CEE
    - CPD (Construction Products Directive)
    - Defines a standard domain in which every component of a structure can be without nor severe changes on its state from a static point of view

# Experiences

- New Requirements
  - <<NEW MOCKUPS>>

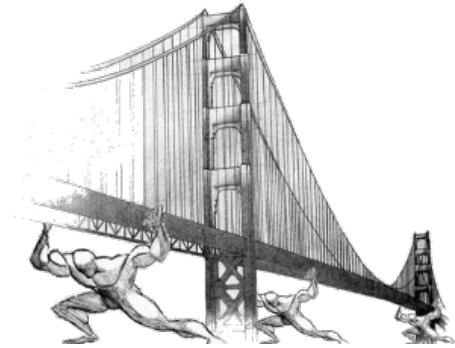


# Experiences



- Changes in documentation
  - Requirement document
    - 3 versions, working on the 4th (the final one)
  - Design document
    - 3 versions, working on the 4th
  - Input and Conversions
    - 5 versions, now it is complete

# Experiences



- Problems
  - Communication
  - Management
  - Inefficient meetings
  - Technologies not familiar to all
  - Setting up environment
  - Being late for meetings
- Solutions
  - Additional Meetings
  - Tasks on github
  - Meeting agenda introduced
  - Additional hours spent on learning
  - Helping each other :)
  - Chocolate penalties :)

# Experiences

- Problems and Solutions

- Ghazaleh

- She decided to left the group
    - Our supervisors told her that her contribution to the project was too small to be considered sufficient for the purposes of this course



# Experiences



- Positive experiences
  - Team work
  - Fun meetings :)
  - Everyone is doing a hard work and trying to do the best they can
  - Improved skills and distributed development experience
  - Good collaboration

# The Web Site

- Some Screenshots



161.53.67.134/BridgeMonitoring/CurrentStateView

Real-time bridge monitoring

User Name:  Password:  Submit

Home Current State Parameters History Diagrams

Actual Values

Anemometer: 0.315 m/s  
Sonar: 2.19 m  
Hydrometer: 17.28625 m

22/03/2011 14:58:40



22/03/2011 15:54:12



Last 24 hours trend:

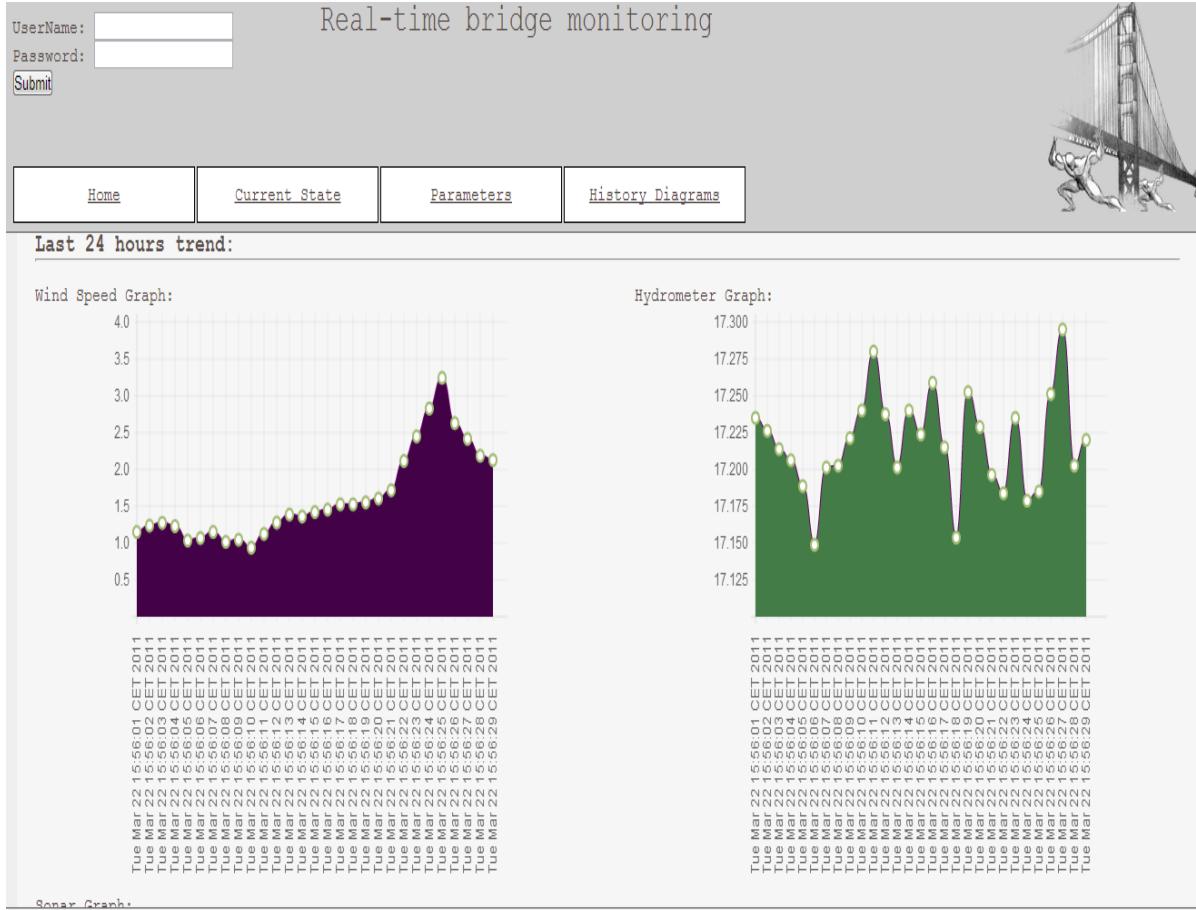
Wind Speed Graph: Hydrometer Graph:

40 17.300 0



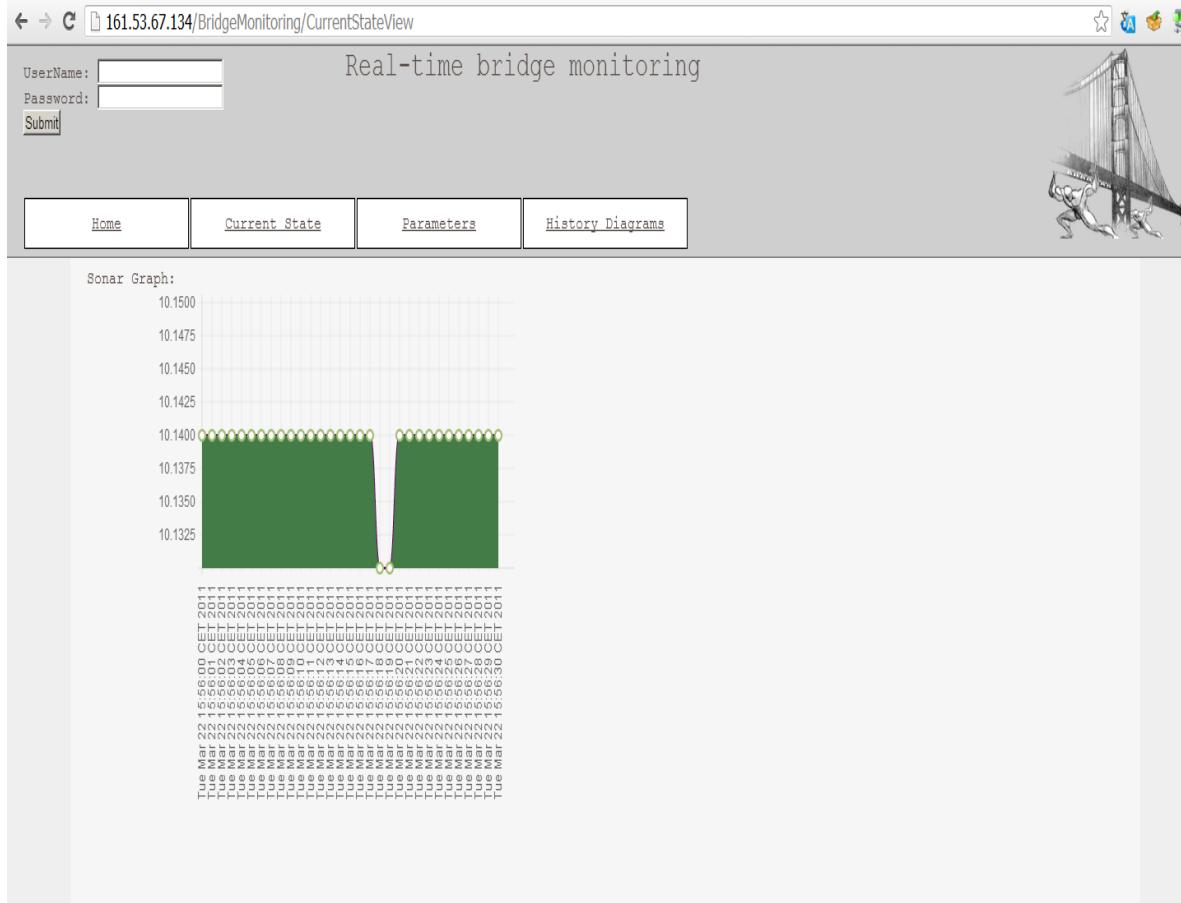
# The Web Site

- Some Screenshots



# The Web Site

- Some Screenshots



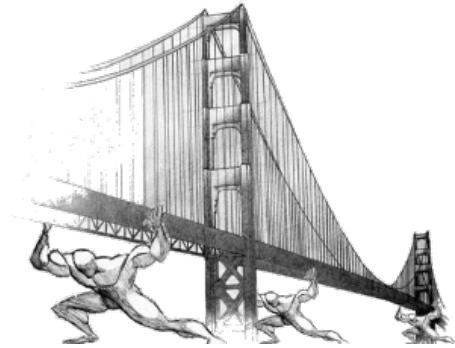
# The Web Site

- Live demo
  - <http://161.53.67.134/BridgeMonitoring>



# Question Time





# Thank you for your attention

