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Beta Presentation

Plunner



Outline

- **Project recap**
- **Requirements changes**
- **Scrum process**
- **Experience with the finished sprints**
- **Testing and integration**
- **Demo**

Background

Main goal of Plunner is to help with planning and managing of meetings.

Target customers:

- Small and medium business companies

Qualities:

- Simplicity
- Automation
- Optimization



Team

FROM POLIMI



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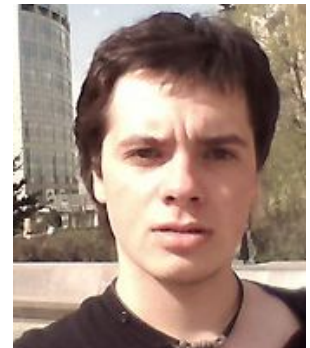
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Team

FROM MDH



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Main requirements

Actors:

- Company
- User
- Planner

A user must be able to:

- Login and recover his credentials
- See planned/to be planned meetings
- Join meetings
- Upload/import schedules
- Indicate free time slots

Main requirements - 1

A company must be able to:

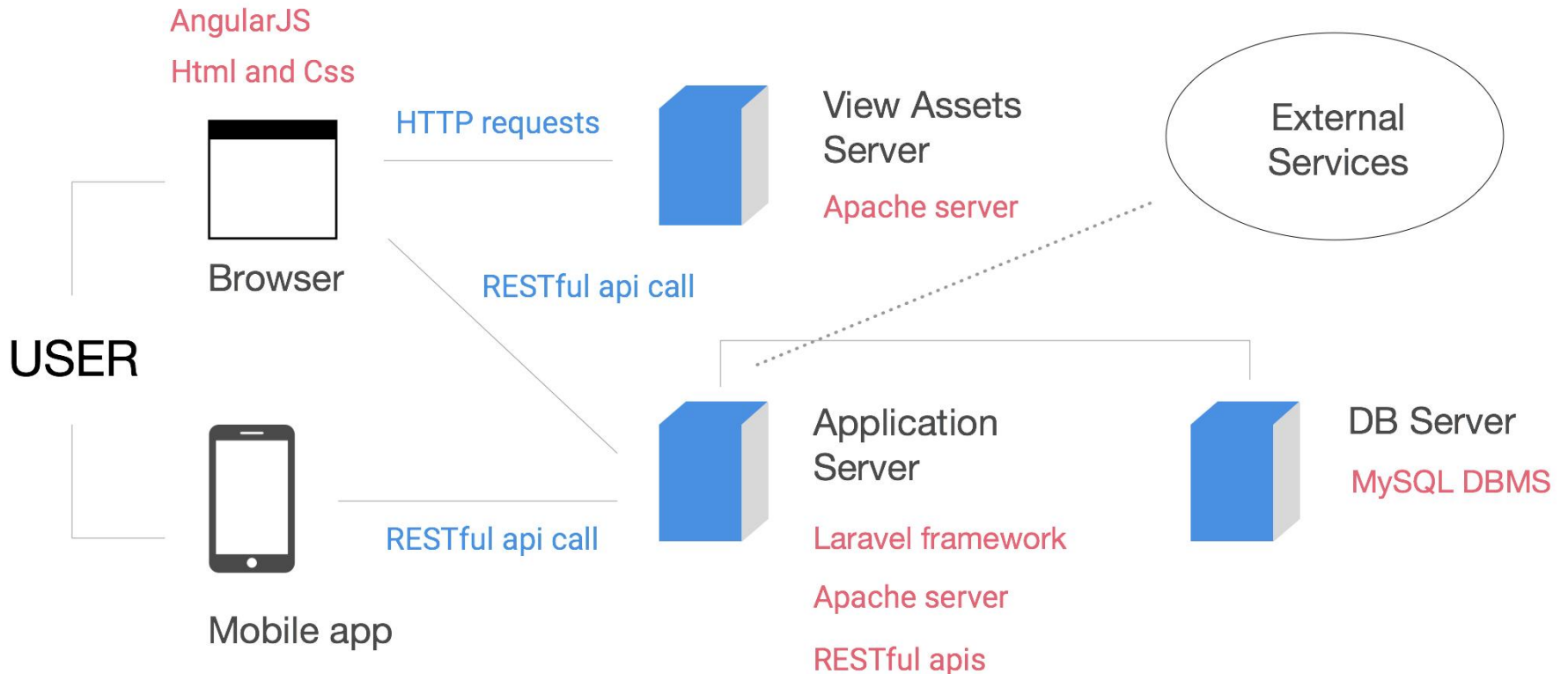
- Login and register
- Register and manage users (employees)
- Create and manage groups of users
- Recover its credentials

Main requirements - 2

A planner must be able to:

- Plan a meeting
- Manage and edit a meeting to be planned
- Have access to same functionalities of users

Plunner's architecture



Project & Scrum roles

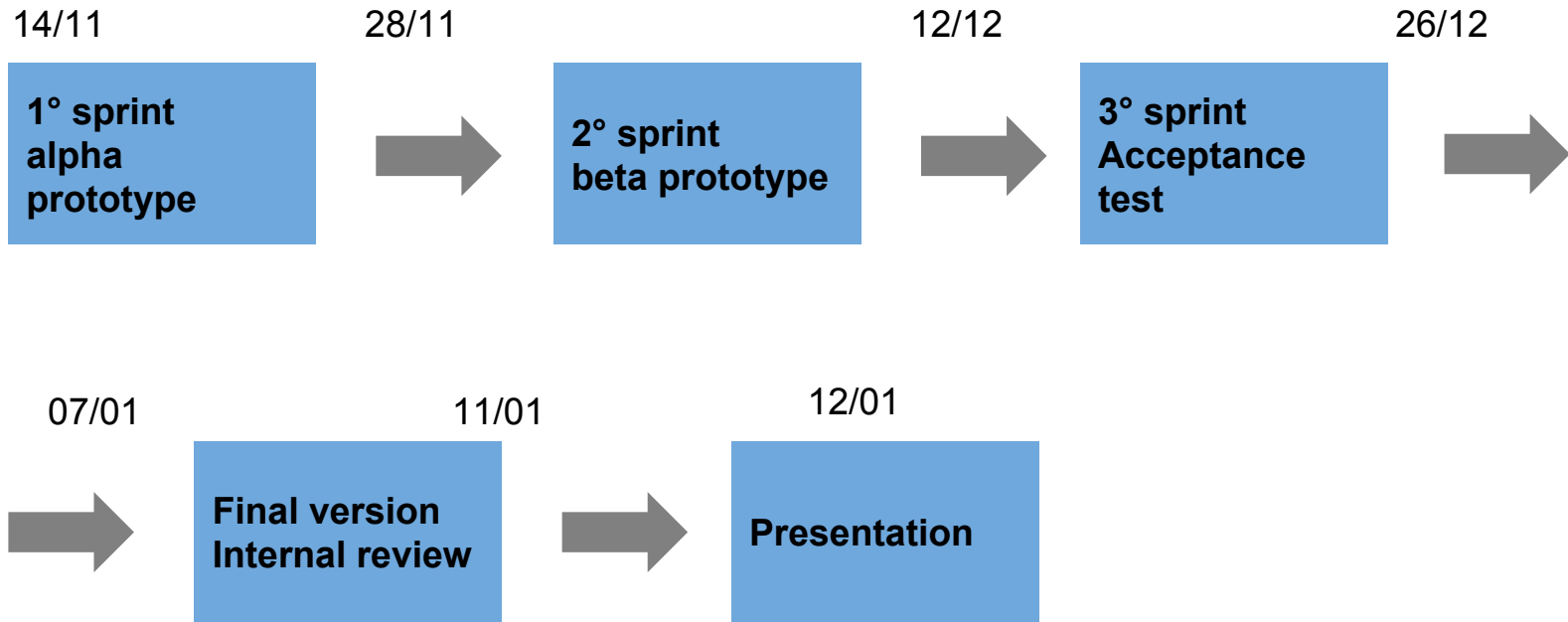
Front end team:

- Giorgio Pea as Model/Controller developer **SCRUM MASTER**
- Jean Barré as View developer

Back end team: **PRODUCT OWNER**

- Claudio Cardinale as **Laravel integration manager, architecture manager, external services manager**
- Denis Kuryshov as **Controller/Model developer**
- Mihovil Vinkovic as **Controller/Model developer**
- Emil Siladi as **Controller/Model developer**

Project Plan



Important changes



Work focus

- Added focus on optimization for choosing the best meeting time
- We believe this is a distinguishing characteristic of a good product

Requirements changes

Since we focused on optimization we had to remove:

- Meeting time constraints
- Importing of users using LDAP
- Repeating meetings
- Requirements changes reflected in documents

The Process



Scrum

Qualities and motivations

- The project can respond easily to changes
- Problems are identified early
- Continuous communication with the client
- Measurable productivity (via burndown, velocity, etc.)
- Better organization

Scrum - 1

Sprints

- *First sprint* (14/11 → 28/11)
Already discussed in the Project Status Section
- *Second sprint* (28/11 → 12/11)
Already discussed in the Project Status Section
- *Third sprint* (12/11 → 26/11)
Dedicated to acceptance test

Scrum - 2

Meetings

- *Daily scrum meeting (everyday at 18:30 for 15mins):* to decide and to assign tasks for the next day
 - We have varying number of participants
- Sprint review/retrospective meetings the day after sprint ends
- Weekly meeting with supervisors

Working hours

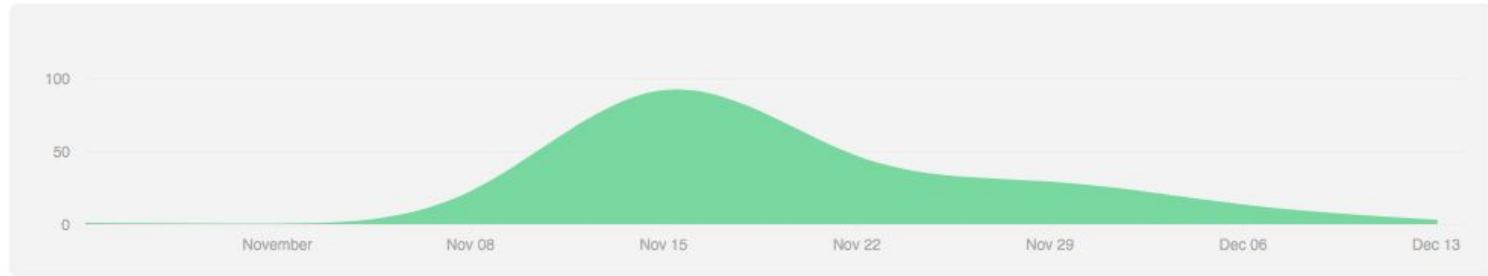


Member	W6	W7	W8
M. Vinković	1	15	18
D. Kuryshov	16.5	16.5	13
G. Pea	34.5	29,5	57
J. Barre	33.5	30	30.5
C. Cardinale	48.5	82.5	74
E. Siladi	33	23	32
Total	167	168.5	224.5



Contributions - on master

FRONTEND



	G. Pea	J. Barré	C. Cardinale
Commits	177	20	14
Additions / Deletion	83 859 / 78 524	3 816 / 1 416	543 / 3

BACKEND



	C. Cardinale	E. Silađi	M. Vinković	D. Kuryshov
Commits	248	26	15	3
Additions / Deletion	10 381 / 4 507	1 189 / 478	849 / 480	348 / 8



Project policies

- Development in a branch
- When tested and passes the CI -> merged to master
- Testing with a seeded database

Risks

- Predicted risks:
 - *Privacy*
 - *Security*
- Both handled adequately right from the start
- Predicted risks, but not the scale:
 - Communication, experience and environment adaptation issues

Experience with the finished sprints



First sprint overview

- 14/11 → 28/11
- Large backlog, 7 out of 10 major stories were selected
- Closed 3 stories from backlog with the rest being partially finished
- 325h total predicted, 322h hours worked
- 1 Team member left the project

First sprint (week 1)

- Slow start for the first week
- Still implemented a good amount
- Estimated 45 hours per person -> actual was 26 hours per person (average)
- 155h total work hours

- After mid-week meeting we decided to invest more time to be able to deliver a good Alpha prototype

First sprint (week 1 metrics)

Name	Type of task	Task	Hours
Claudio	backend	registration, login, github	67
Giorgio	frontend logic	login, organisations	31
Jean	frontend UI	mockups	14
Denis	backend	-	7
Mihovil	backend	groups controller, tests	18
Emil	backend	models and DB migrations	18

First sprint (week 2)

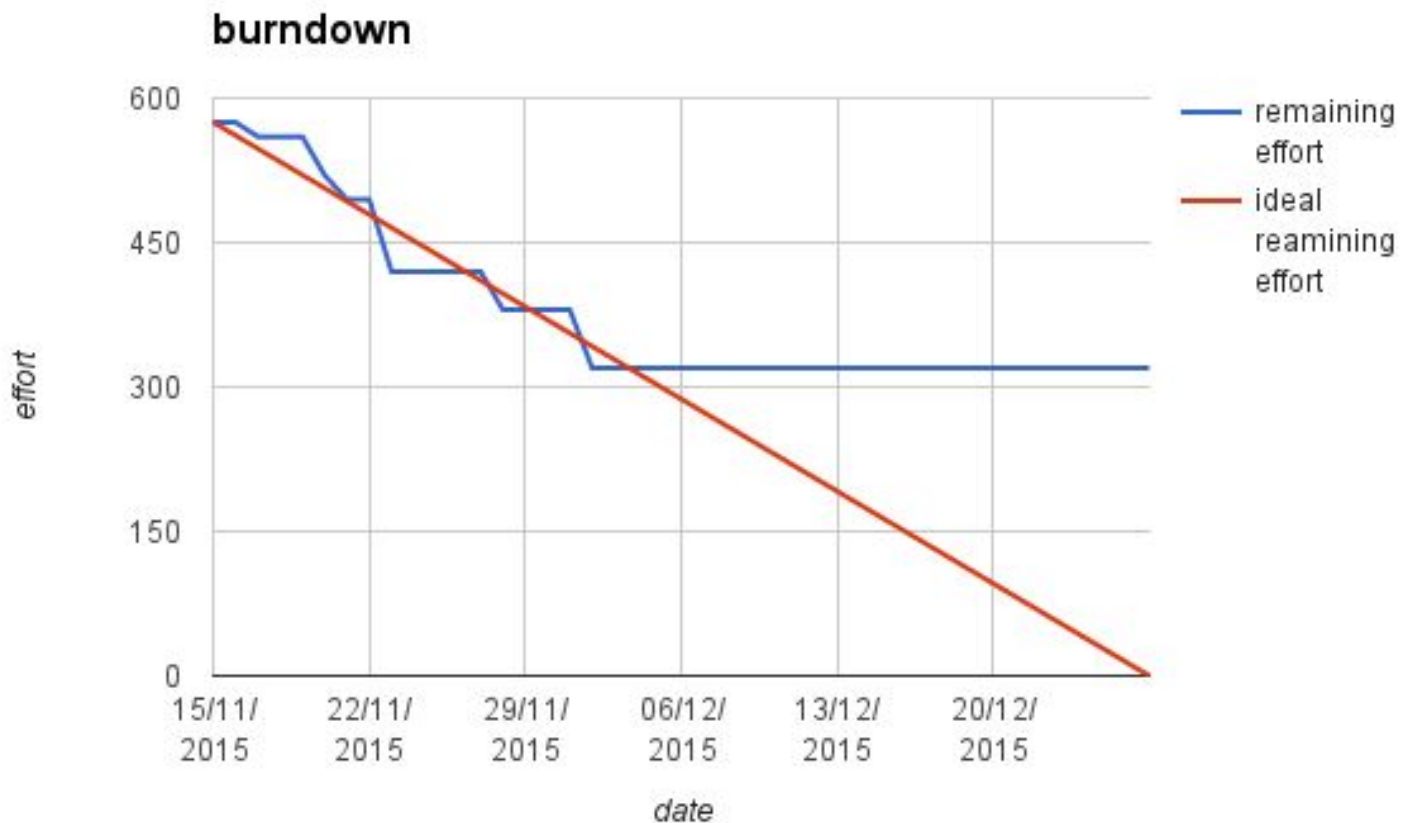
- More time was invested
- Close to predictions
- Delivered a functional Alpha prototype with some of the desired functionalities

- Estimated 45 hours per person -> actual was 28 hours per person (average)
- 167h total work hours

First sprint (week 2 metrics)

Name	Type of task	Task	Hours
Claudio	backend	regis., planner: controller, bugs	48.5
Giorgio	frontend logic	registration, login, groups	34.5
Jean	frontend UI	registration, login, groups	33.5
Denis	backend	calendar: controller, DB, tests	16.5
Mihovil	backend	-	1
Emil	backend	groups, planner: DB, controller	33

First sprint (burndown chart)



First sprint backlog refinement

- 4 unfinished user stories were transferred to second sprint backlog
- Some new requirements were added to the backlog
- Work distribution among team members was clear from the start

First to second sprint transition

- Maintain work pace of the second week
- Better and more frequent communication is necessary
- Better attendance of meetings is encouraged

Second sprint overview

- 14/11 → 28/11
- Higher attendance of daily meetings
- Better communication
- Implemented all desired major functionalities

- 300h total predicted, 393 hours worked

Second sprint (week 1)

- No slow start for the first week, work started immediately
- Estimated 25 hours per person -> actual was 28 hours per person (average)
- 168.5h total work hours

Second sprint (week 1 metrics)

Name	Type of task	Task	Hours
Claudio	backend	optimisation, caldav, support	82.5
Giorgio	frontend logic, documentation	testing, refactoring, remaining requirements, documentation	29,5
Jean	frontend UI	-	2
Denis	backend	calendar controller, tests	16.5
Mihovil	backend	planning meeting	15
Emil	backend	groups, planner, empl. tests	23

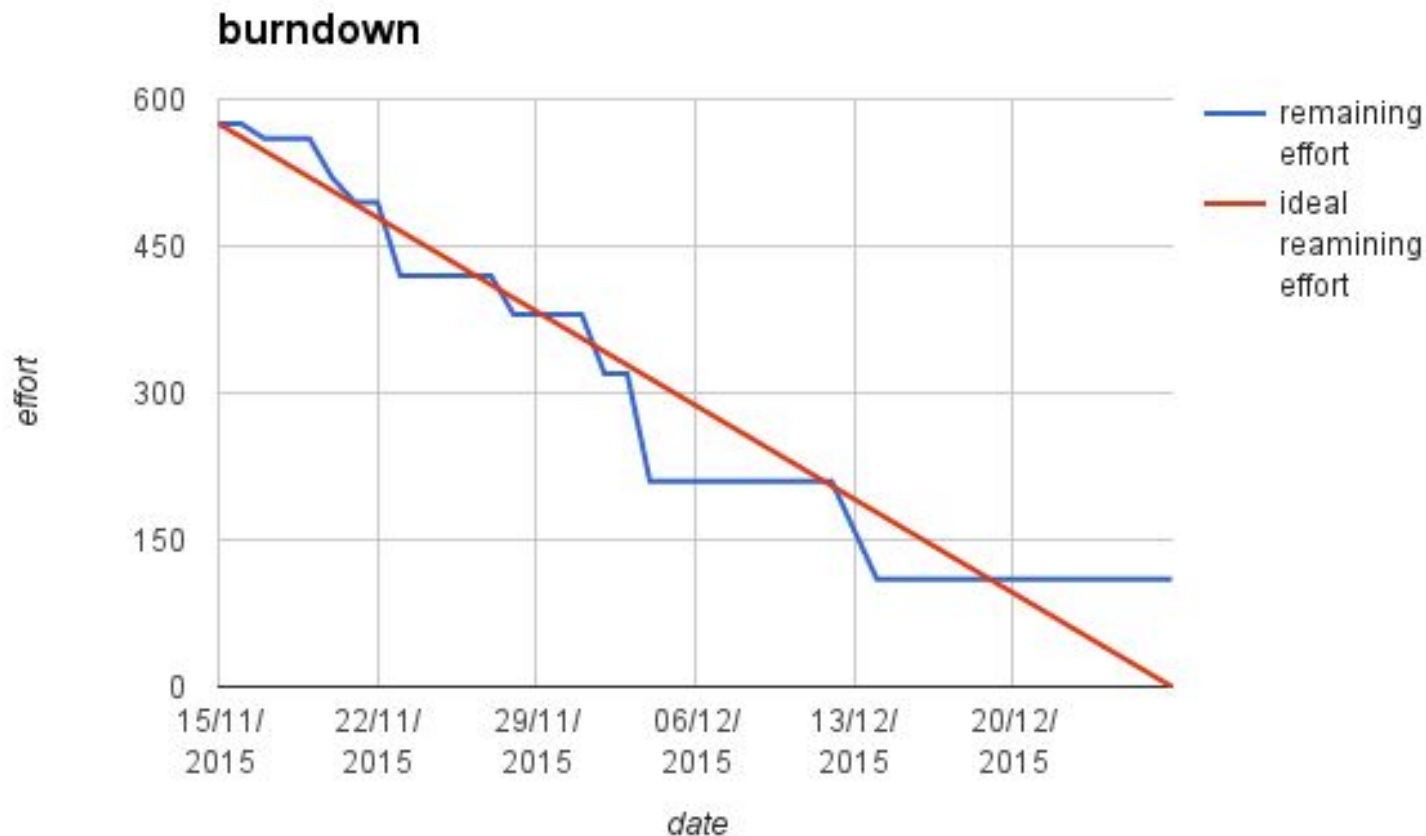
Second sprint (week 2)

- Finalisation of all requirements
- We had to change database representation of the meetings for the optimisation implementation
- Estimated 25 hours per person -> actual was 37.5 hours per person (average)
- 224.5 total work hours

Second sprint (week 2 metrics)

Name	Type of task	Task	Hours
Claudio	backend	optimisation, supervision	74
Giorgio	frontend logic, documentation	documentation, remaining requirements	57
Jean	frontend UI	global, sign in and user interf	30.5
Denis	backend	draft: busy timeslots	13
Mihovil	backend	draft: planners and meetings	18
Emil	backend	meetings, planner: contr., tests	32

Second sprint (burndown chart)



Second to third sprint transition

- All the planned major functionalities implemented
- Some non-essential requirements were dropped due to time constraints
- Preparation for testing
- Will implement the dropped requirements if we finish testing and integration

Third sprint

- Focus on acceptance testing
- Some small features will be finished and polished
- Test plan is located in testing section

Comparison of 1st and 2nd sprint

- 1 major improvement was the increase in communication and average work load
 - we were able to complete more requirements
- communication should still be improved which in the end would result in less overhead
- documentation was ignored in favor of increased work on implementation (now rectified)

SCORE

- Still on track
- Will start working on the report during the third sprint
- We are confident in our product and that we have a good chance to win

Acceptance test plan

- Coverage improvements for backend unit tests
- Increase the number of front-end unit tests
- Stress tests (if the time is sufficient)
- End to end tests (if the time is sufficient)

Testing and Integration

- <https://scrutinizer-ci.com/g/dsd-meetme/backend/?branch=master>
- <https://travis-ci.org/dsd-meetme/backend/builds/96742765>



Travis CI

Optimisation (short version)

$x_{ij} = \{1 : \text{person } i \text{ attends meeting } j; 0 : \text{other cases}\}$

$y_{ij} = \{1 : \text{meeting } i \text{ is planned to start at timeslot } j; 0 : \text{other cases}\}$

$\max \sum \{i \text{ in Users, } j \text{ in Meetings}\} \{x[i,j] * \text{MeetingsDuration}[i]\}$

<https://docs.google.com/document/d/18vCFEVrd8ENgS80hC-ACjSicDFYXV2QjoFiO3FiGZ5w/edit?usp=sharing>

Demonstration

→ admin.plunner.com

- Optimisation demo (Claudio Cardinale)

<http://api.plunner.com/optimiseDemo.php>

http://api.plunner.com/optimise.php?company_id=ID

- Organization management, schedules, meetings (Giorgio Pea)

Questions?

