smart campus

RATIONALE FOR COURSE-WORK

Antonella De Angeli
Department of Computer Science and Engineering

UNIVERSITY OF TRENTO - Italy

trentorise
Open Innovation rooted in Research and Education

social innovation

citizens

participatory design

community

design

customizability

open data & services

lead user

user-centred design

users testers

end-user development

living labs

WHAT IS SMART CAMPUS?

Community creating services they need and like

Socio-technical platform for the creation and delivery of campus services

Living lab for experimenting with innovative ICT solutions

On-line communities

- On-line communities have a **purpose** are supported by **technology** and are guided by **policies**
- **Important dimensions are**
  - **Where does the community exist?**
    - **only virtually or has a physical presence**
  - **Why does the community exist?**
    - **Primary purpose**
  - **How does the community exist?**
    - **Type of software**
  - **What is the community history?**
    - **Size and for how long the community has existed**

Sociotechnical systems (STS)

- An approach to complex design that recognizes the interaction between people and technology in workplaces and society at large.
- It emphasises interaction between society's complex infrastructures (both social and technical) and human behaviour

Living lab

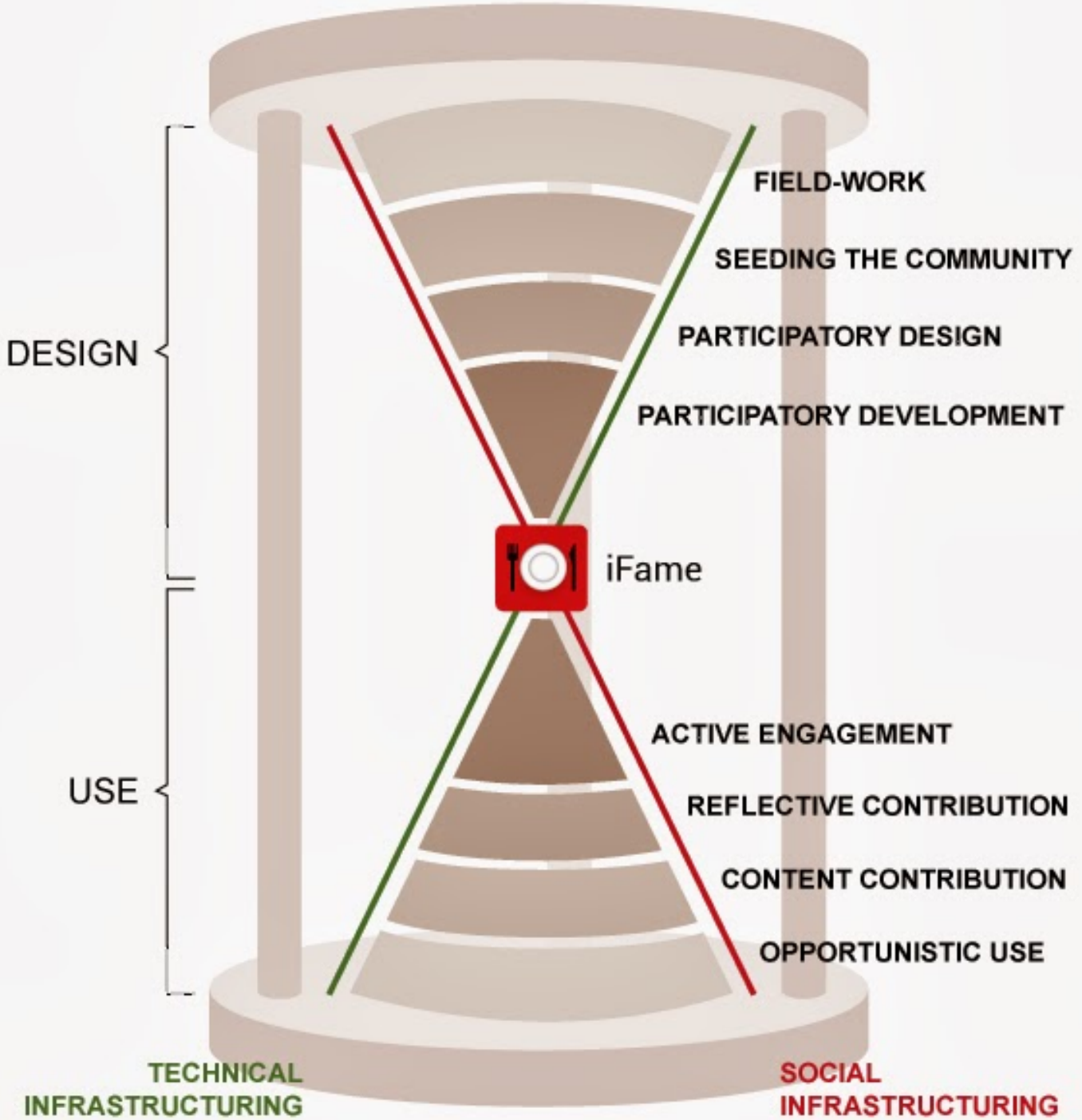
- A user-centred, open-innovation ecosystem, operating in a territorial context (e.g. city, agglomeration, region), integrating concurrent research and innovation processes within a public-private-people partnership.
- Research concept

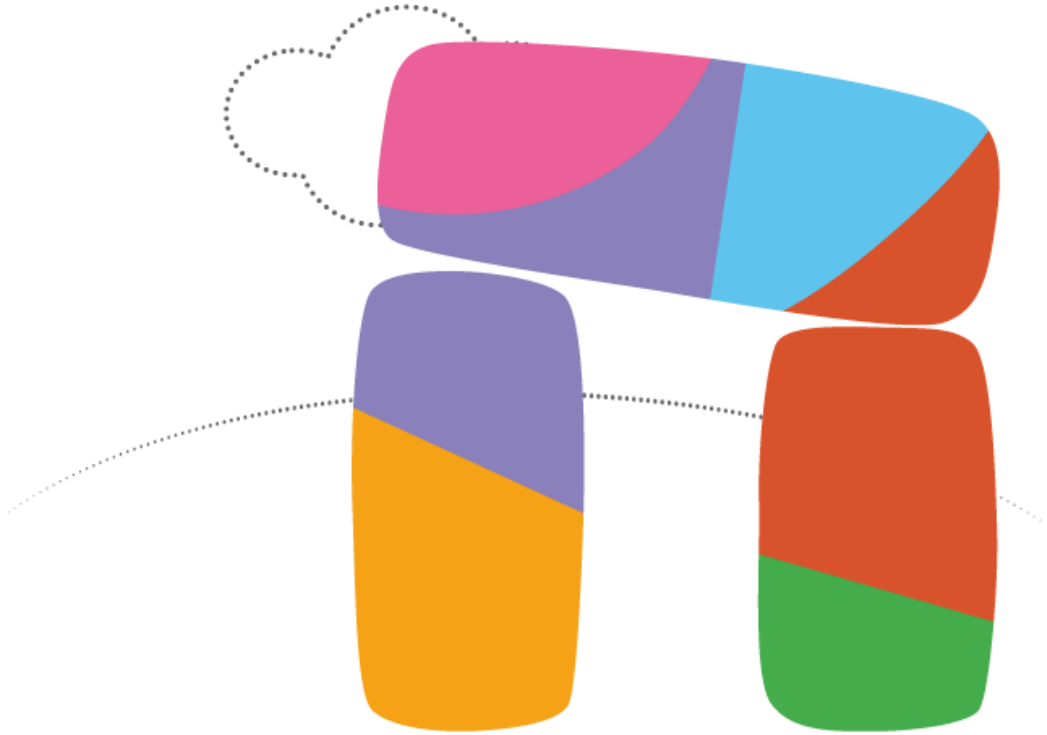
SMART CAMPUS

- A University campus is a scaled-down, but complete model of a smart city
- Towards a smart city lab in Trentino

University of Trento

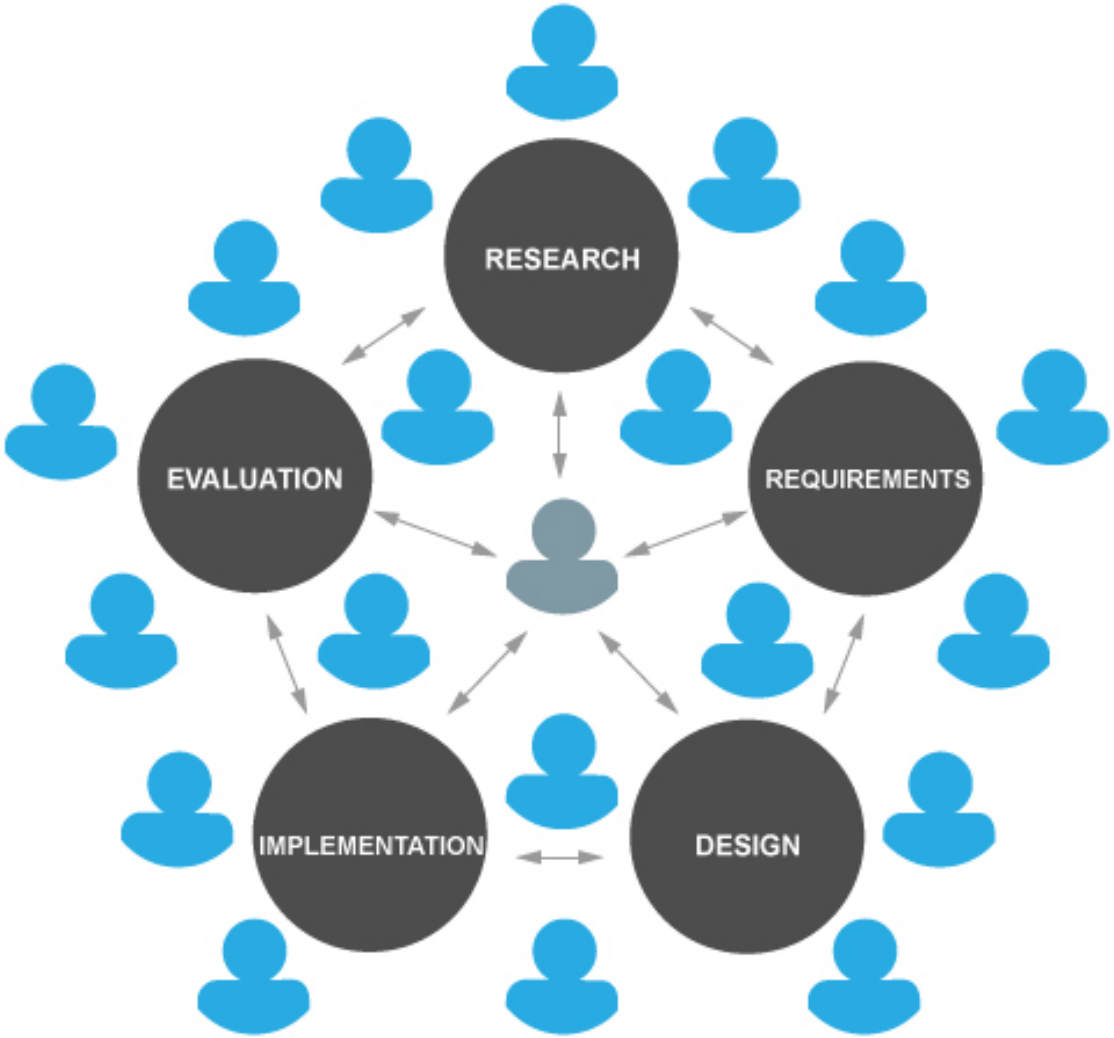
METHODOLOGY

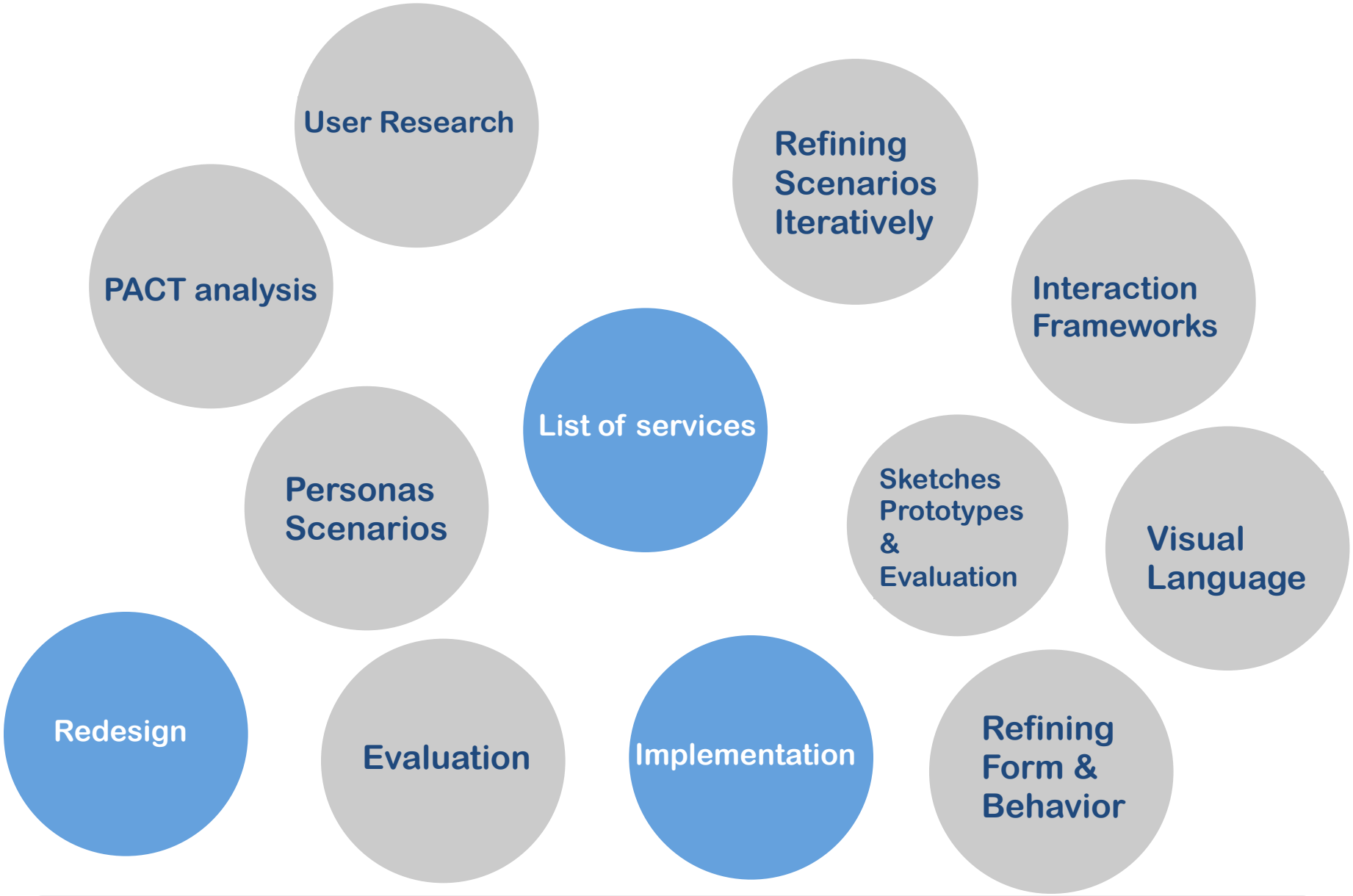

DESIGN
USE
FIELD-WORK
SEEDING THE COMMUNITY
PARTICIPATORY DESIGN
PARTICIPATORY DEVELOPMENT
iFame
ACTIVE ENGAGEMENT
REFLECTIVE CONTRIBUTION
CONTENT CONTRIBUTION
OPPORTUNISTIC USE
TECHNICAL INFRASTRUCTURING
SOCIAL INFRASTRUCTURING



Field-work 2011-12

DESIGN

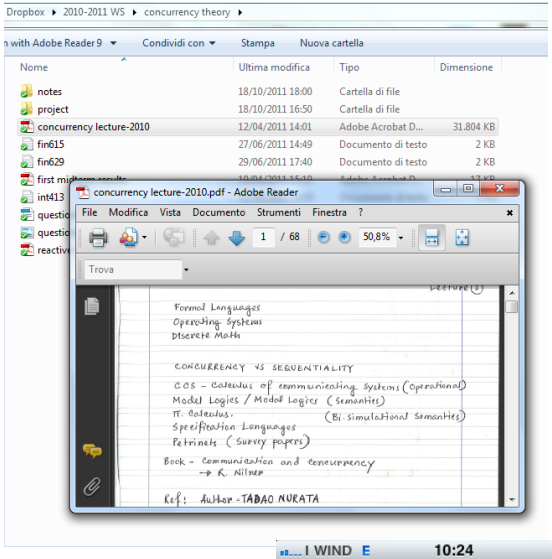

RESEARCH
EVALUATION
REQUIREMENTS
IMPLEMENTATION
DESIGN

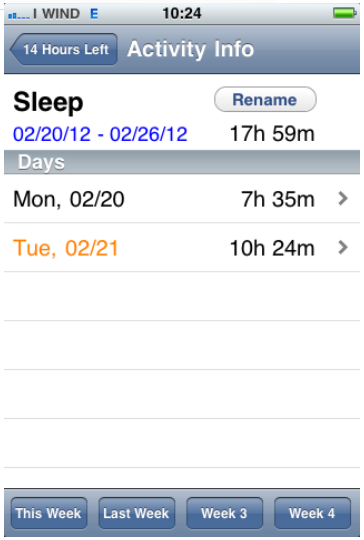

User Research
Refining Scenarios Iteratively
PACT analysis
Interaction Frameworks
List of services
Personas Scenarios
Sketches Prototypes & Evaluation
Visual Language
Redesign
Evaluation
Implementation
Refining Form & Behavior

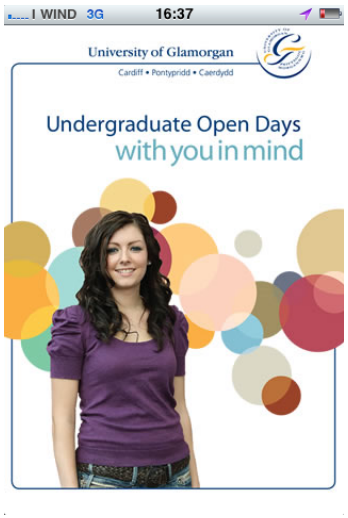
USER RESEARCH

- Methodology
  - Co-design with 6 groups of students
  - Questionnaire study: perspective students
  - Focus groups
  - Design workshops
  - Diary study
- Results
  - List of services
  - Personas
  - Scenarios

BENCHMARKING







STUDENTS

Variations due to Careers

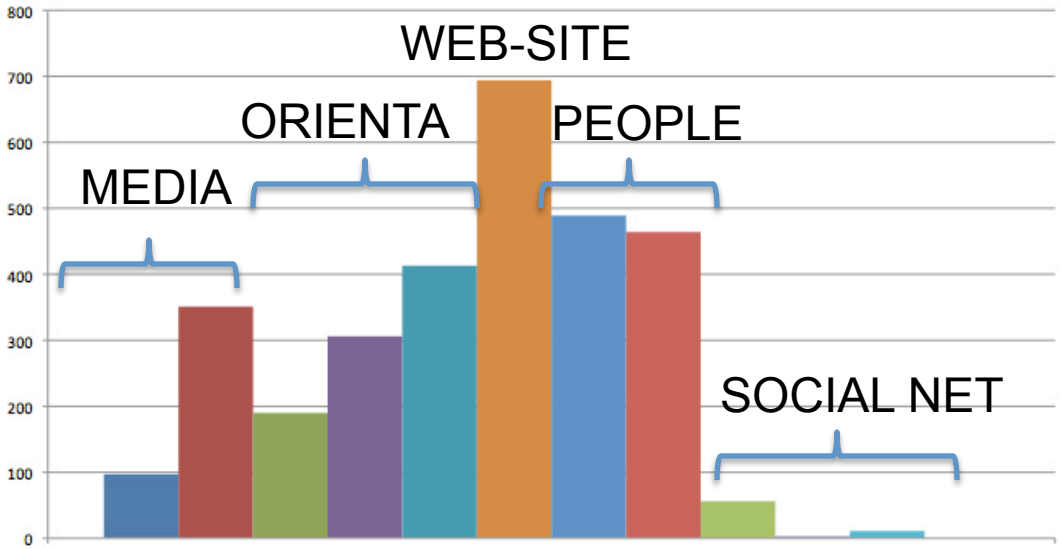
- Perspective, Triennale, Specialistica, PhD
- Newcomers, second/third year, planning and writing the thesis

Gender

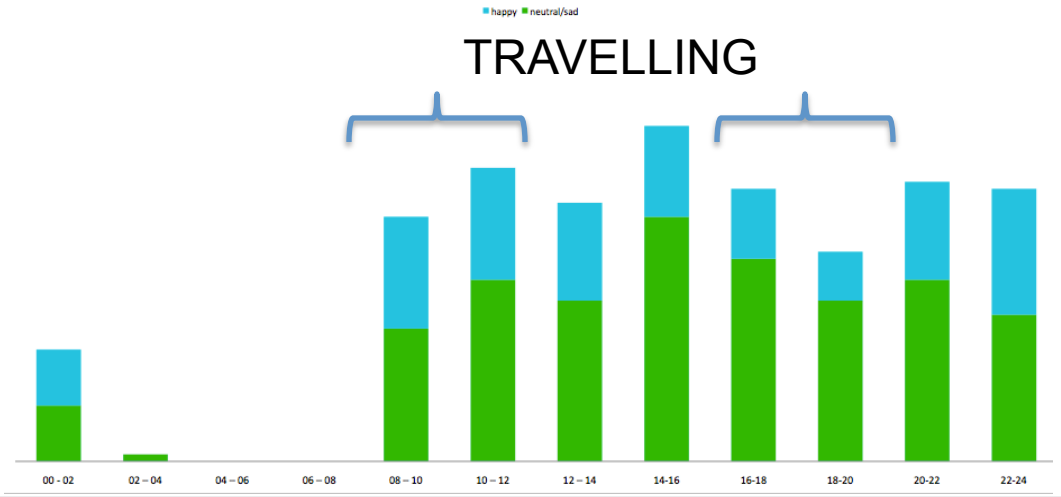
Curriculum

Country of origin

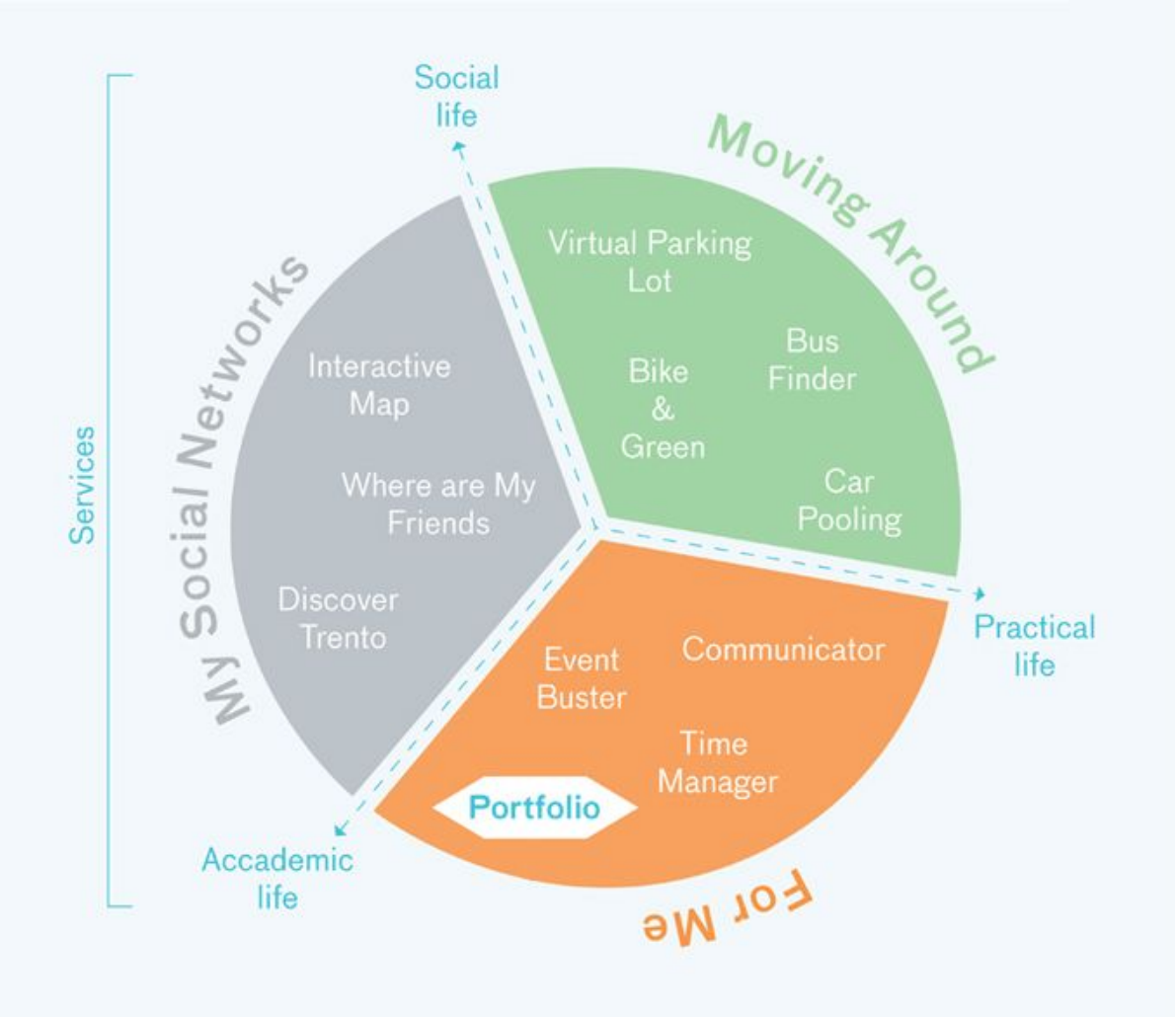
SPACE FOR DESIGN



WHERE DO I STUDY?



SERVICES: MIX OF USER, UNI & TECH REQUIREMENTS



FIRST LIST OF SERVICES

25 Services (PACT style)

Discover Trento. A geographical service for students who wish to share their interests while moving around Trento.

Main focus: social context (leisure, sport and culture). Implications for tourism.

Decisions taken by PMT and University staff

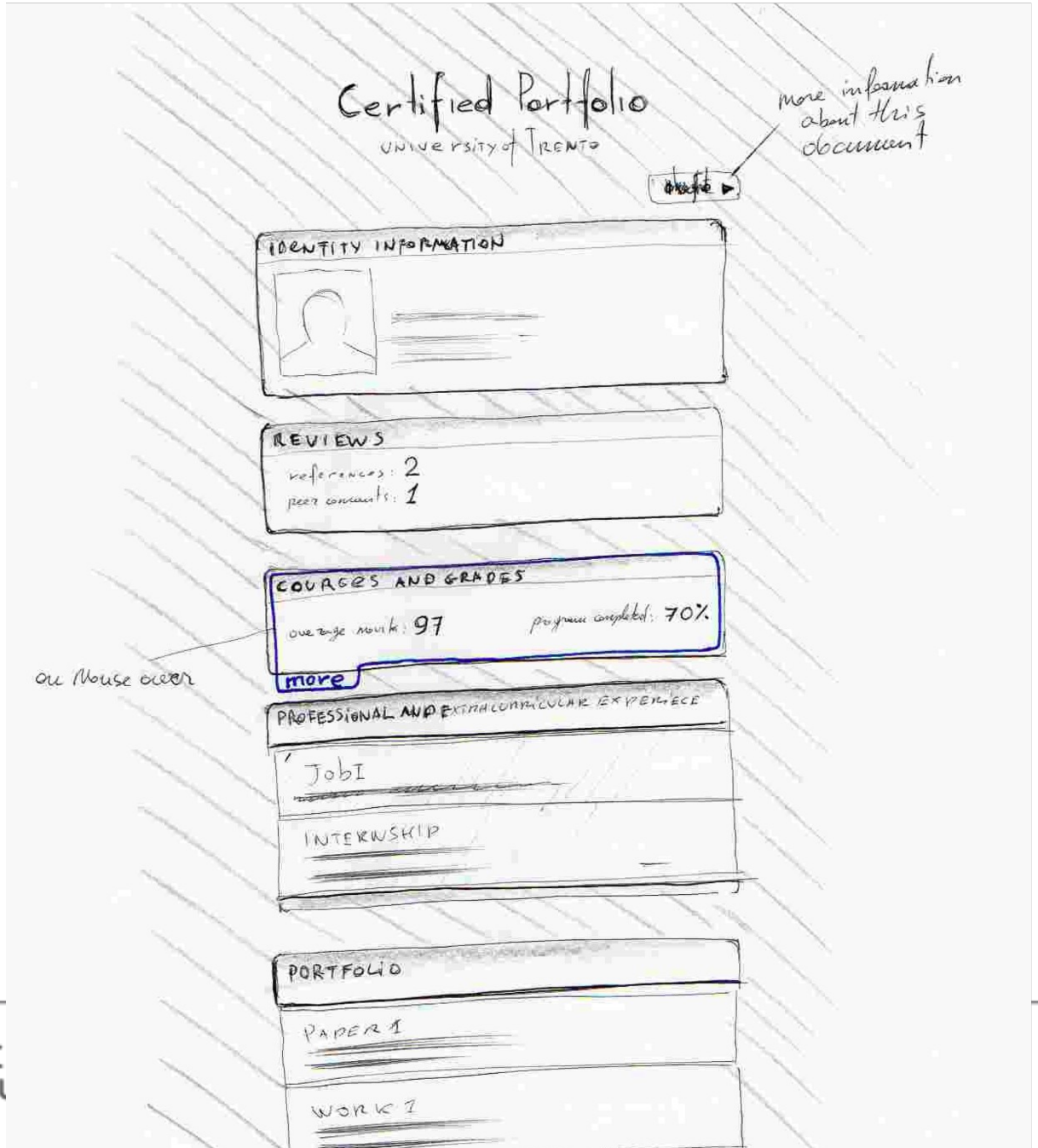
Seeding the community (2012-13)

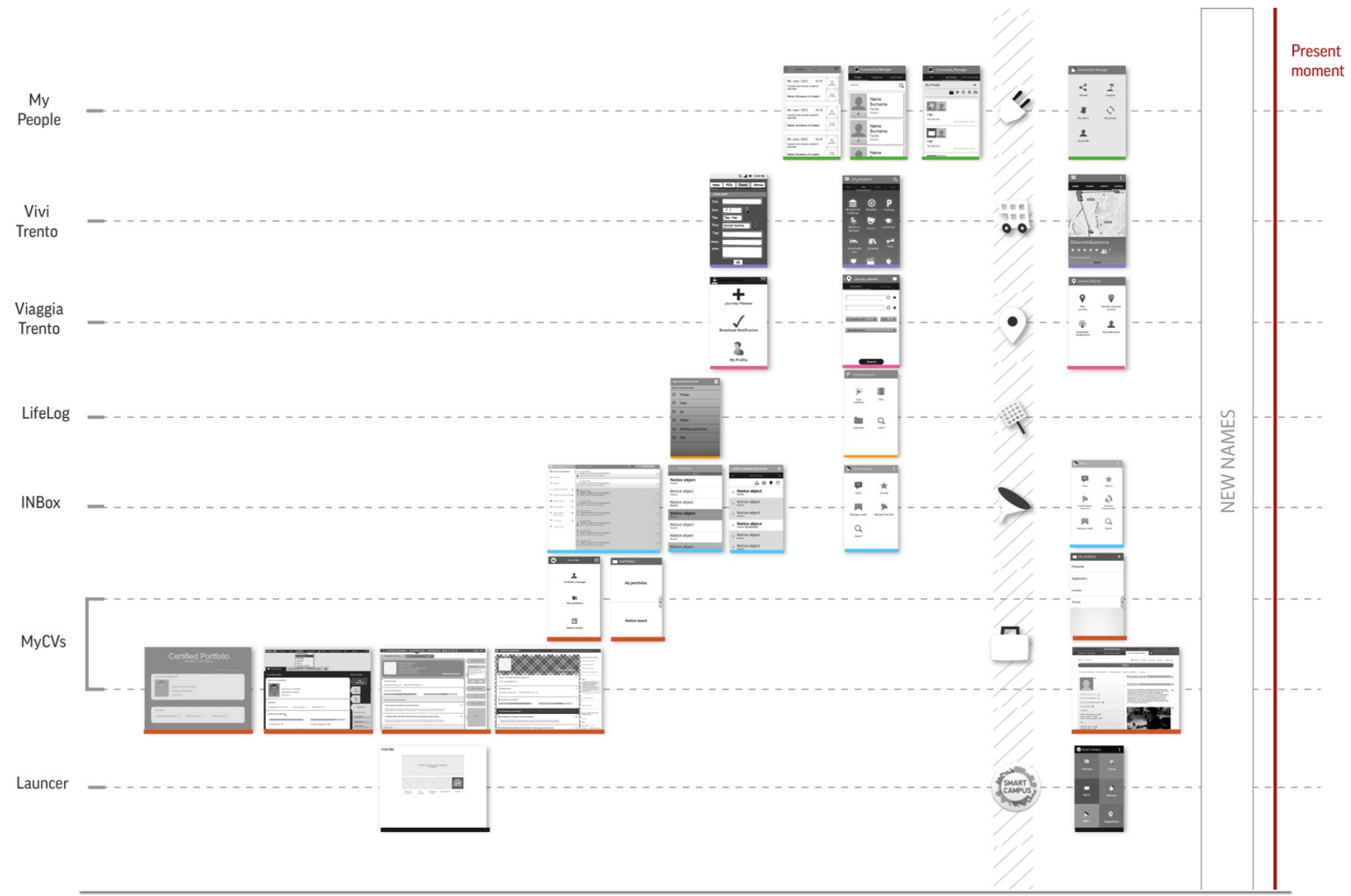
SCENARIOS

Carlo received his MSc degree in Computer Science from the University of Trento in November and is now looking for a position as programmer in Torino.

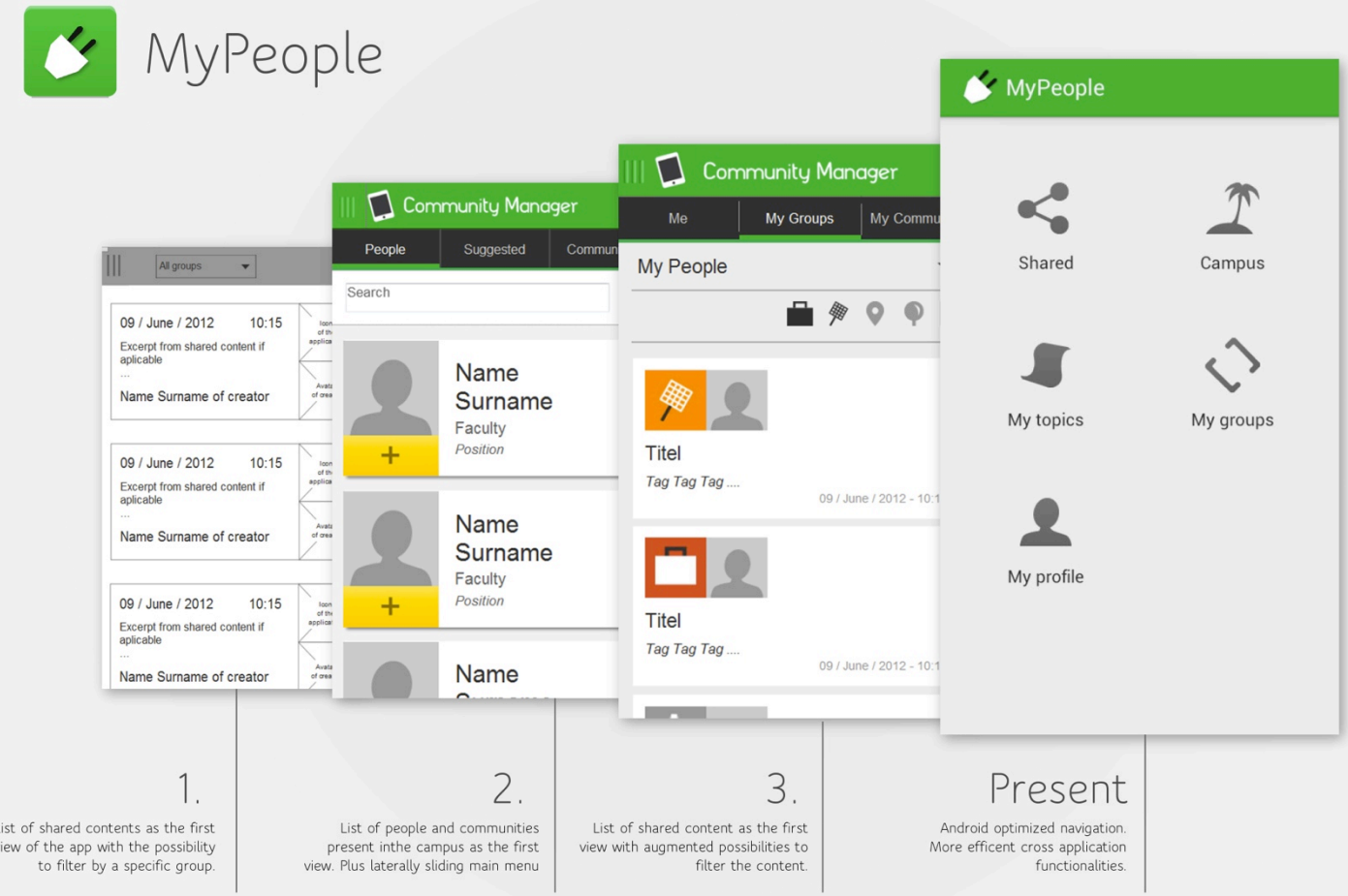
He was invited to submit a CV and some examples of his work to an important software company but he is having a difficult time to find the right material among the many course-works, programs and sketches produced in the last years.

He searches his hard disk, memory sticks and old laptop for documents about which he has forgotten names and location. When Carlo found them, he often cannot open them because the applications with which they were created are old. He finds himself after two days of work with little materials and still needs to write a CV.


Certified Portfolio
UNIVERSITY of TRENTO
more information about this document
IDENTITY INFORMATION
REVIEWS
references: 2
peer comments: 1
COURSES AND GRADES
average mark: 97
program completed: 70%
more
on Mouse over
PROFESSIONAL AND EXTRACURRICULAR EXPERIENCE
JobI
INTERNSHIP
PORTFOLIO
PAPER 1
WORK 1


My People
Vivi Trento
Viaggia Trento
LifeLog
INBox
MyCVs
Launcer
Present moment
NEW NAMES
Certified Portfolio
SMART CAMPUS

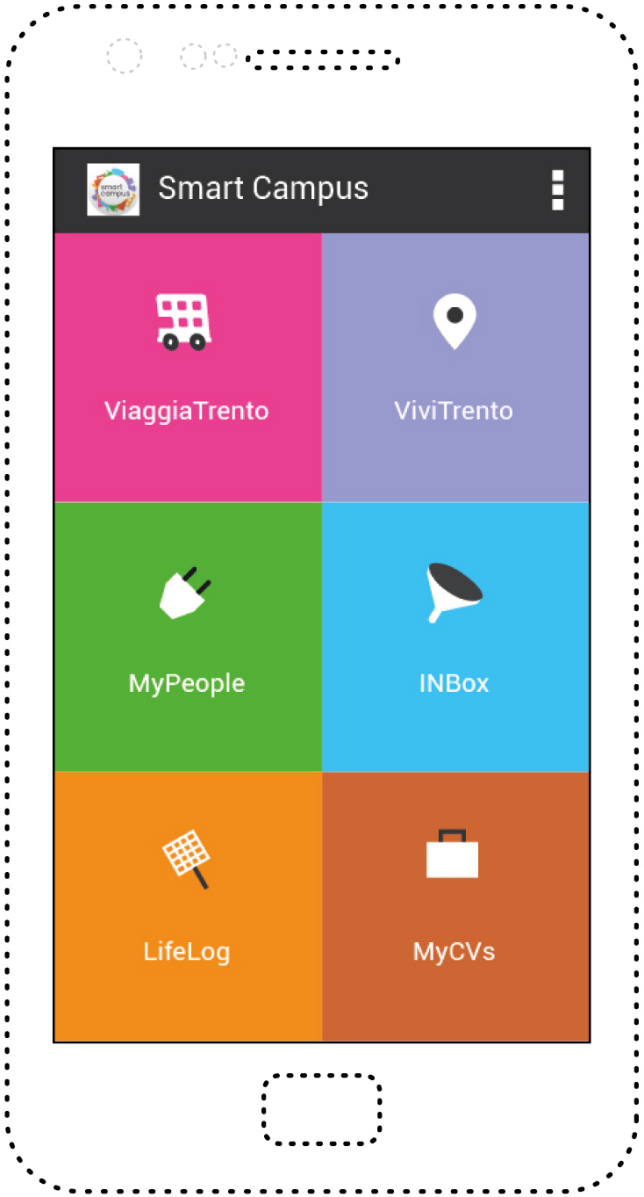
SERVICE DESIGN



Plan your trips and get notifications

Organize your social contacts

Collect photos, videos and more



Events & places around you

Organize University news

Create your verified CV

GOING LIVE!!

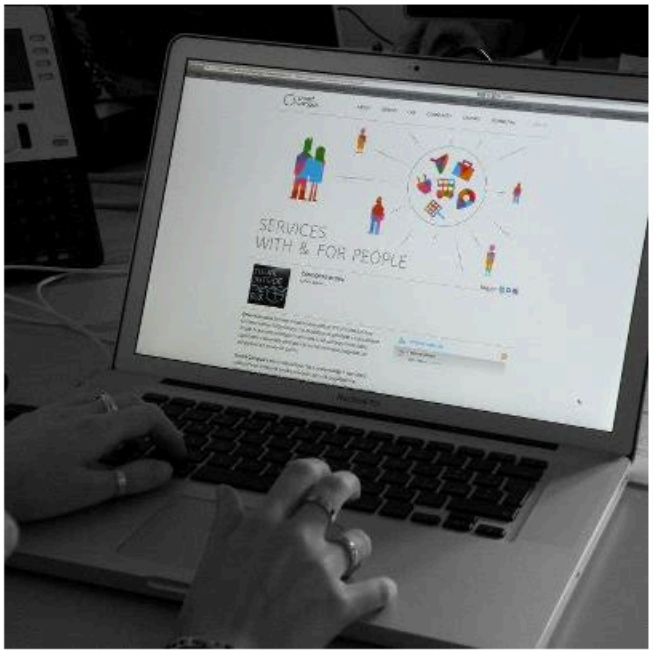
SAMSUNG
Smart Campus
Discover Trento
Journey Planner
Communicator
Community Manager
Experience Builder

ORGANISING THE STUDY

Smart Campus Lab Forum
Services WITH and FOR people
Board index ‹ Technical support ‹ MyPeople
User Control Panel (0 new messages) • View your posts
Chrash da "my profile"
POSTREPLY
Search this topic...
Search
Chrash da "my profile"
QUOTE
by
» Tue 27 Nov 2012, 21:55
Cliccando sul simbolo + presente nella schermata l applicazione non risponde e dopo qualche secondo lo scherma diventa nero e l applicazione viene terminata dal sistema operativo. Finche il sistema operativo non avverte l utente che ha terminato "community manager" il telefono è bloccato.
Re: Chrash da "my profile"
QUOTE
by
» Tue 27 Nov 2012, 22:04
Ho verificato: si tratta di un baco. Grazie per la segnalazione. Apro immediatamente un ticket presso i nostri sviluppatori per risolverlo al piu' presto. Grazie ancora!

tester/designer/developer team --- good design comes from a community!! Let us know if you are interested!
2 febbraio alle ore 10.45

Smart Campus Lab presso Smart Campus Lab.
30 gennaio



Mi piace · Commenta · Condividi 2

A Tiziano Molinari, Trento RISE, Sylvie Noel e altri 11 piace questo elemento.

Smart Campus Lab ha condiviso un link.
28 gennaio

We thank Paolo Traverso, speaker of 1st Smart City seminar! He made a very interesting lecture and we will soon upload a selection of the main points of his talk!

Visualizza traduzione

FBK – Fondazione Bruno Kessler
cit.fbk.eu

His main research interests are in Software and Services, Artificial Intelligence, and the Automated Verification and Synthesis of software

elemento.

Smart Campus Lab
1 febbraio

180 likes! Our community is growing fast :)

Visualizza traduzione

Mi piace · Commenta

A Gabriele Zacco, Giovanni Artusi, Mattia Benedetti e altri 2 piace questo elemento.

Smart Campus Lab ha condiviso un link.
29 gennaio

Find us also on Google +

Visualizza traduzione

Smart Campus – Google+
plus.google.com

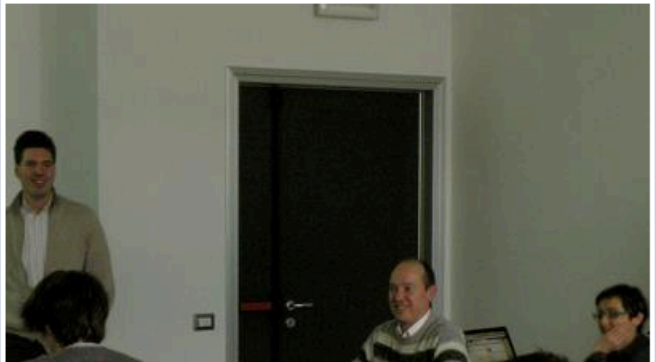
Smart Campus – Services WITH and FOR people – SmartCampus is a lab and a community. The lab builds a social and technical environment for collaborative

Mi piace · Commenta · Condividi

A Martina Margoni e Gabriele Zacco piace questo elemento.

Smart Campus Lab
29 gennaio

Ideas Contest presentation_28 january 2013 (8 foto)



Search

Have an account? **Sign in**

- **Tweets**
- Following
- Followers
- Favorites
- Lists

Follow Smart Campus Lab

Full name

Email

Password

Sign up

Worldwide Trends · Change

#CandyHeartRejects
#OnValentinesIllBe
#QuieroUnaFotoCon
#iHateHowPeople
#QueLindoEs
iCarly For The KCA
Feliz San Valentín
Happy Valentines Day

Smart Campus Lab

@smartcampus_lab

Services WITH and FOR people

Trento, Italy · smartcampuslab.it

34 TWEETS	50 FOLLOWING	44 FOLLOWERS	Follow

Tweets

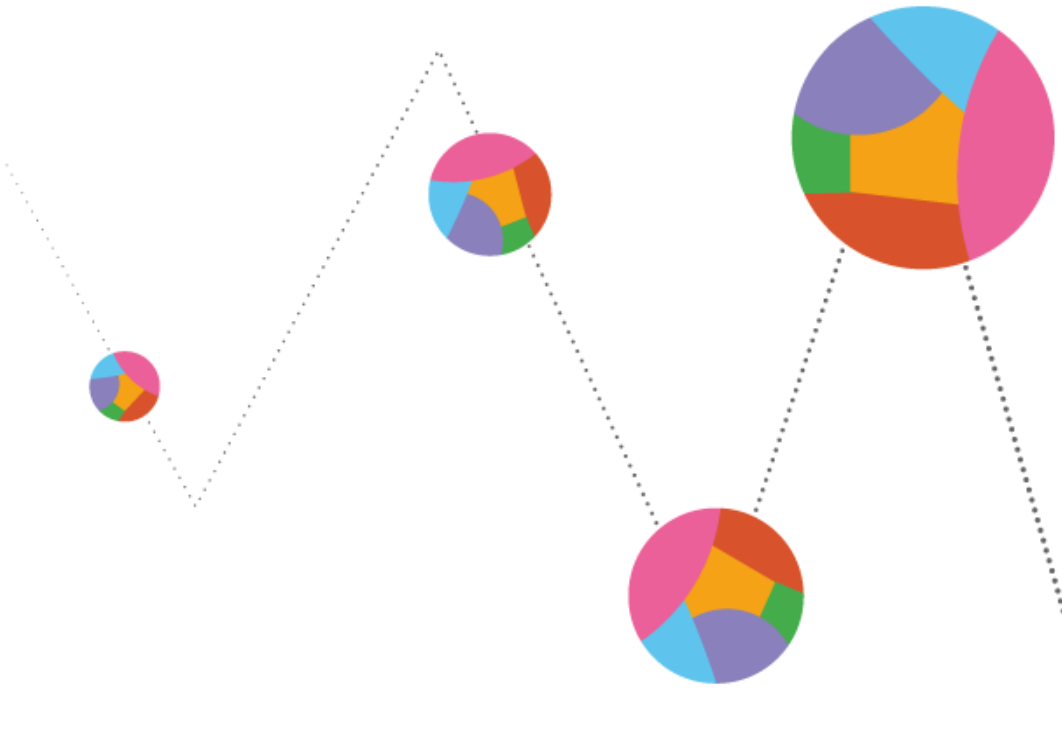
Smart Campus Lab @smartcampus_lab 9h
Don't miss tomorrow's Smart City seminar on participatory design - 11:00 sala Stringa, FBK buildings - Povo (TN)
trentorise.eu/news/smart-stu…
Expand

Smart Campus Lab @smartcampus_lab 16h
Pic from the lab! pic.twitter.com/apTAn8gn
View photo

Smart Campus Lab @smartcampus_lab 7 Feb
Next week we're having prof. Antonella De Angeli talking about #participatory #design at 2nd #smartcity #seminar
facebook.com/events/1501790…
Expand

Smart Campus Lab @smartcampus_lab 7 Feb
Time for answers in our photo contest! #facebook
facebook.com/smartcampuslab…
Expand

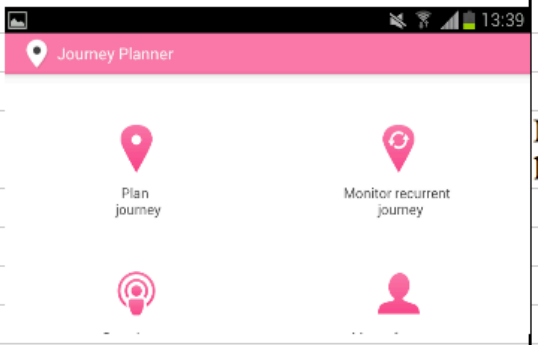
Smart Campus Lab @smartcampus_lab 6 Feb
Have a look at our #facebook photo challenge last post!



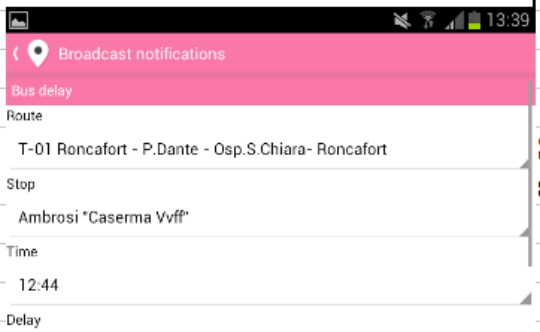
Participatory design

HCI/CSCW course-work

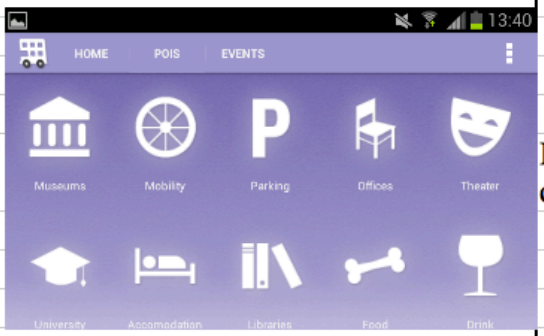
- Longitudinal project (two year+)
- 400 students (computer science and sociology) + 120 friends
- Evaluate the apps, give feedback, design prototypes,
- Select lead-user for Participatory Development



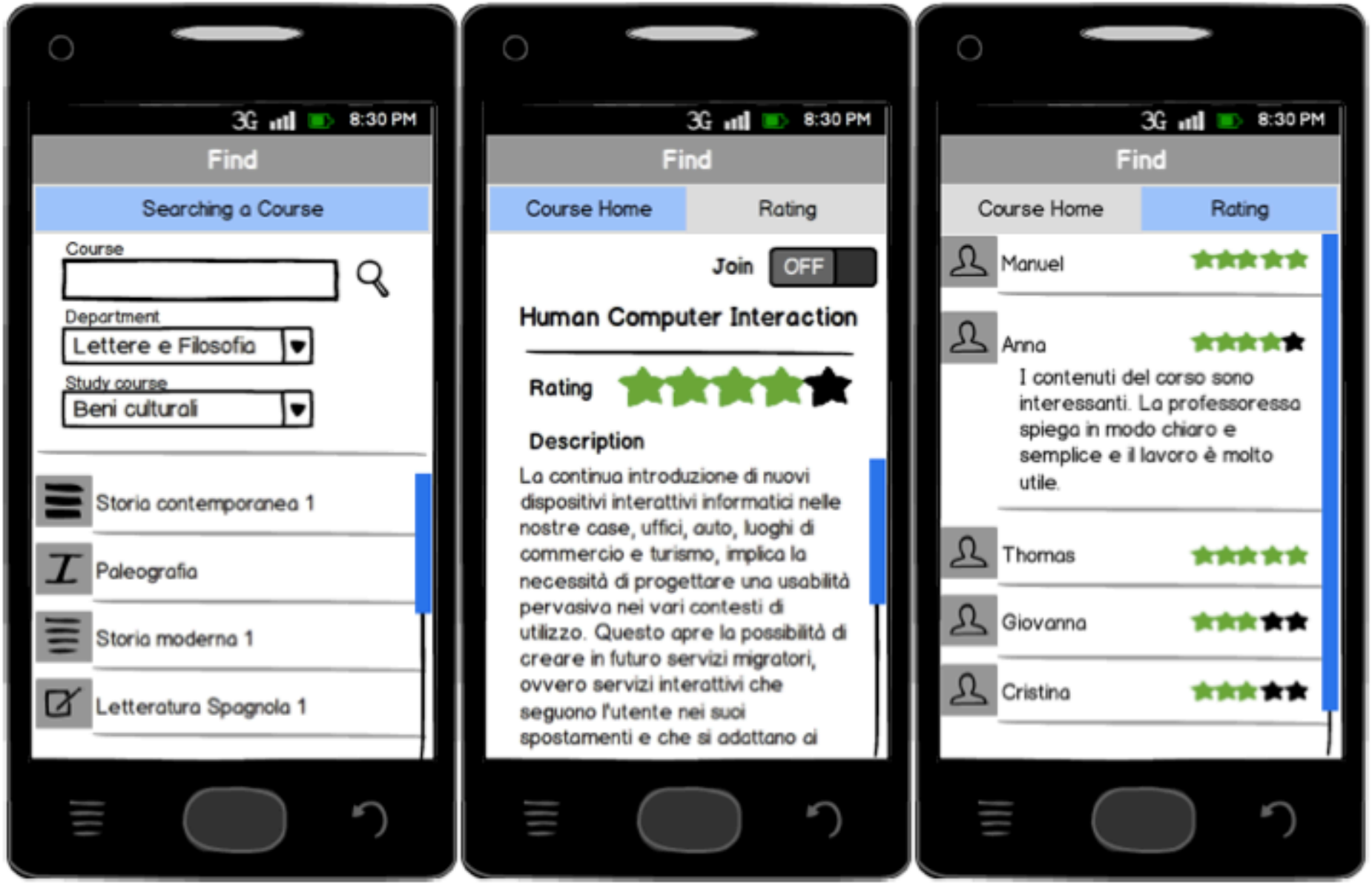
La schermata orizzontale non è ottimizzata per contenere tutte le opzioni.



Sempre nella schermata orizzontale la barra di scorrimento si sovrappone con gli indicatori sottostanti.



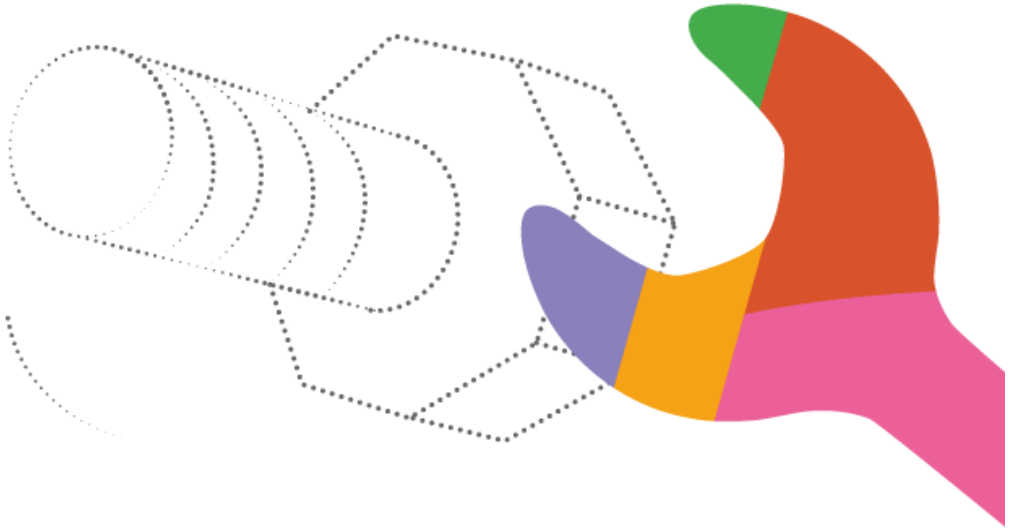
In *Discover Trento* la visibilità del focus sui tab è eliminate nel caso di visualizzazione orizzontale.


3G 8:30 PM
Find
Searching a Course
Course
Department
Lettere e Filosofia
Study course
Beni culturali
Storia contemporanea 1
Paleografia
Storia moderna 1
Letteratura Spagnola 1
3G 8:30 PM
Find
Course Home
Rating
Join
OFF
Human Computer Interaction
Rating
Description
La continua introduzione di nuovi dispositivi interattivi informatici nelle nostre case, uffici, auto, luoghi di commercio e turismo, implica la necessità di progettare una usabilità pervasiva nei vari contesti di utilizzo. Questo apre la possibilità di creare in futuro servizi migratori, ovvero servizi interattivi che seguono l'utente nei suoi spostamenti e che si adattano ai
3G 8:30 PM
Find
Course Home
Rating
Manuel
Anna
I contenuti del corso sono interessanti. La professoressa spiega in modo chiaro e semplice e il lavoro è molto utile.
Thomas
Giovanna
Cristina

Design CONTESTS

- Teams of students
- Present their app proposal and design to a committee
- Win an internship where to implement it

iFame
iFretta
iDeciso
iGradito
iSoldi
3G
8:30 PM
Select Room
Polo Ferrari
Today, 15:27
First floor
A101 - 3 h
A105 - 2 h 30 m
A108 - 1 h
Second floor
A201 - 3 h
2nd
A205 - 2 h 30 m

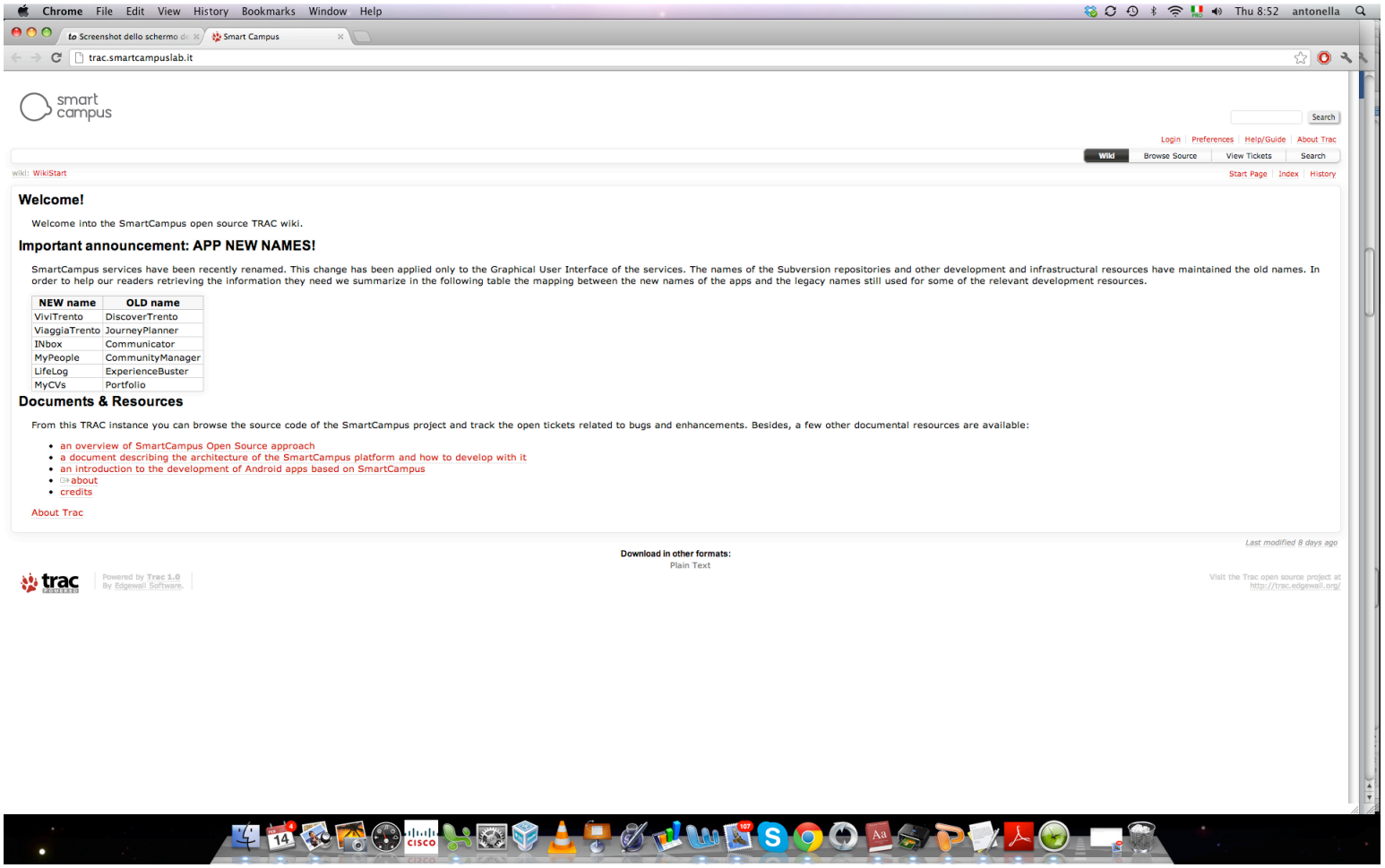


Participatory development

INTERNSHIPS

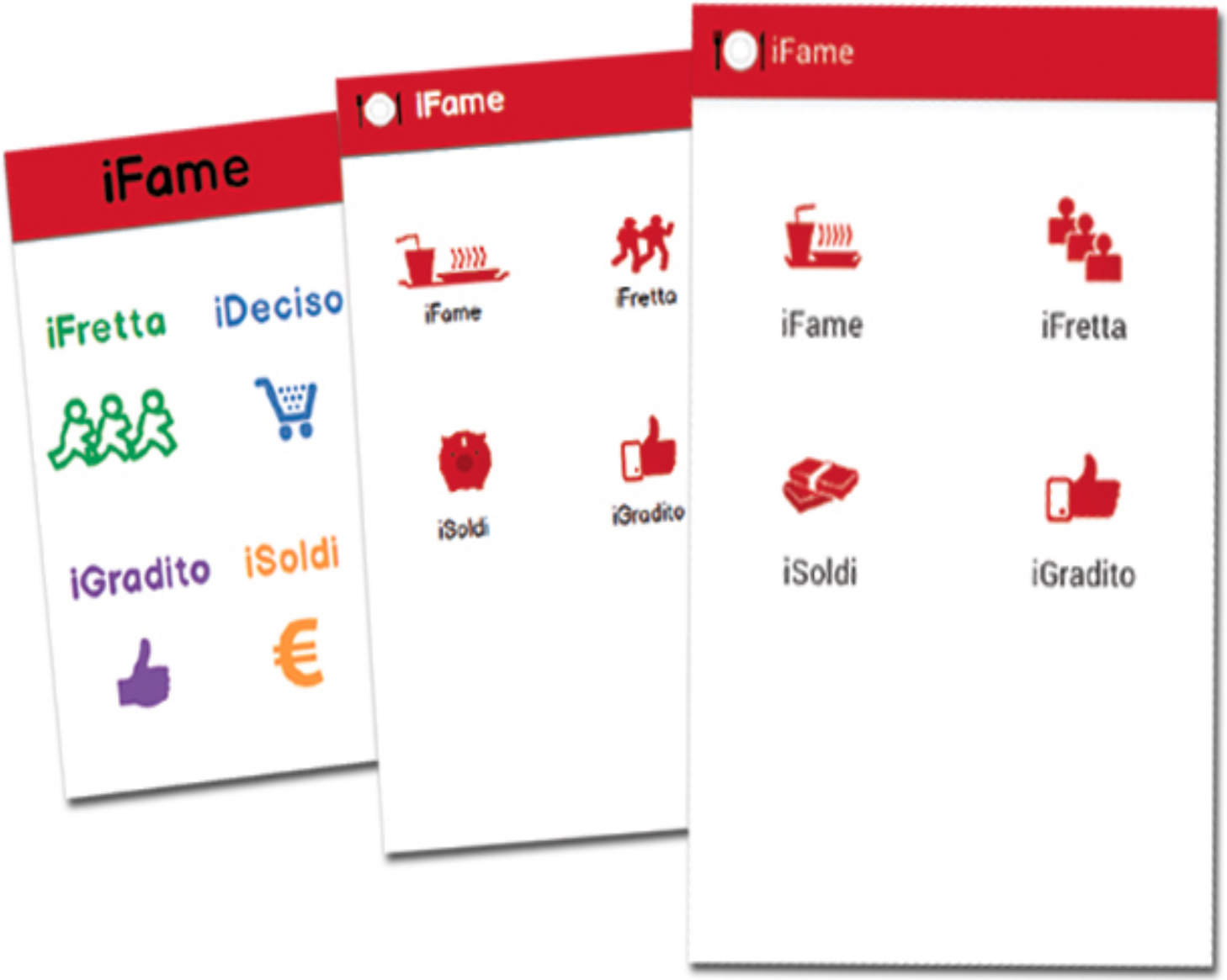
- 15 computer science students
- Design and develop their own app ideas within the team
- Integration with the Smart Campus ecosystem
- Apps about to be released for in-the-wild evaluation

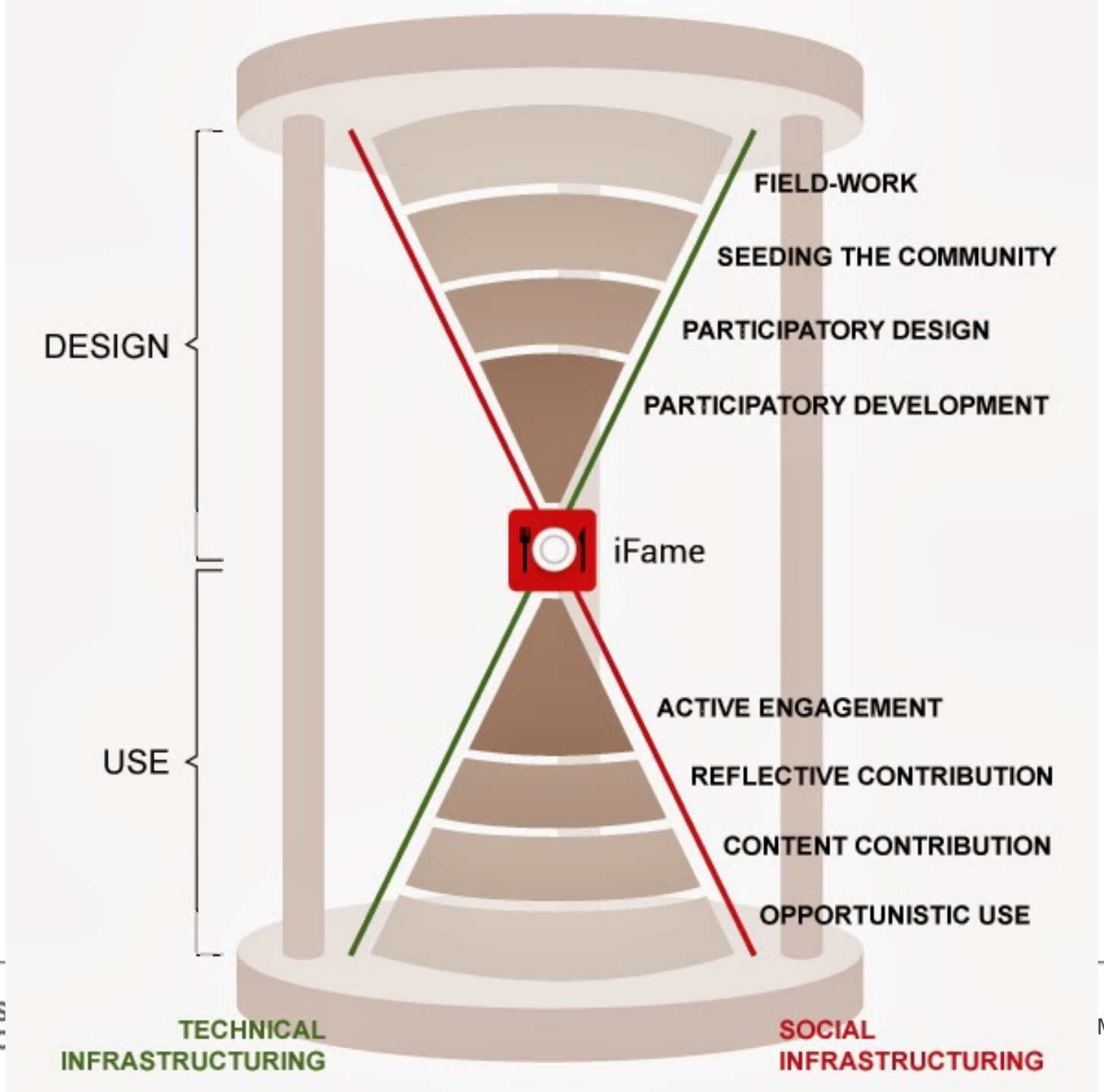
GOING OPEN SOURCES



HACKATHON

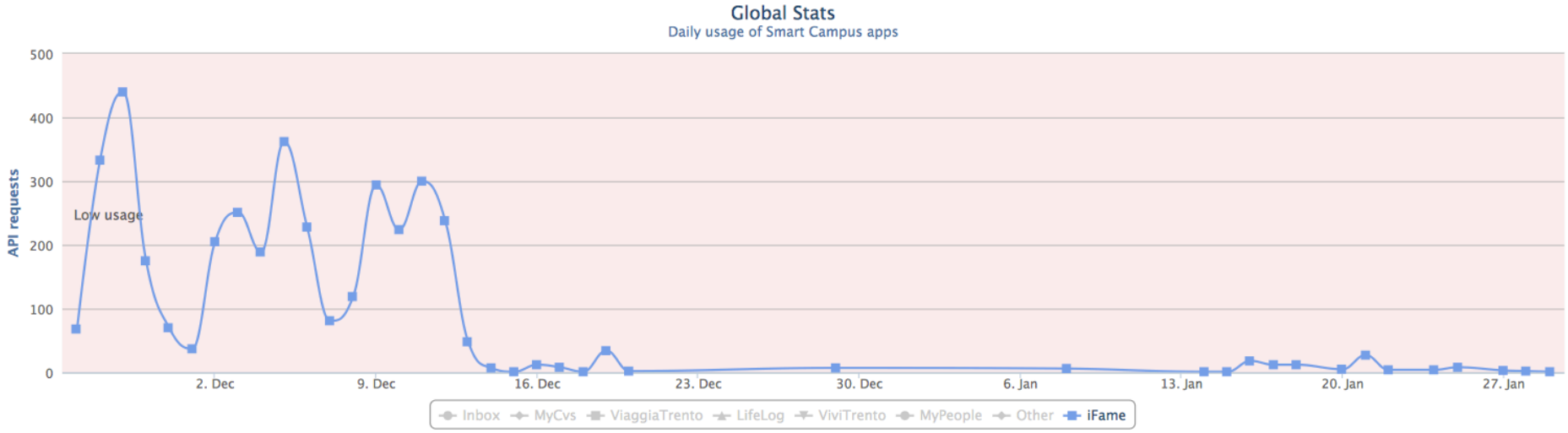
- 30 computer science students, 48 hours
- Design and develop new app prototypes
- Combine resources provided by the existing platform

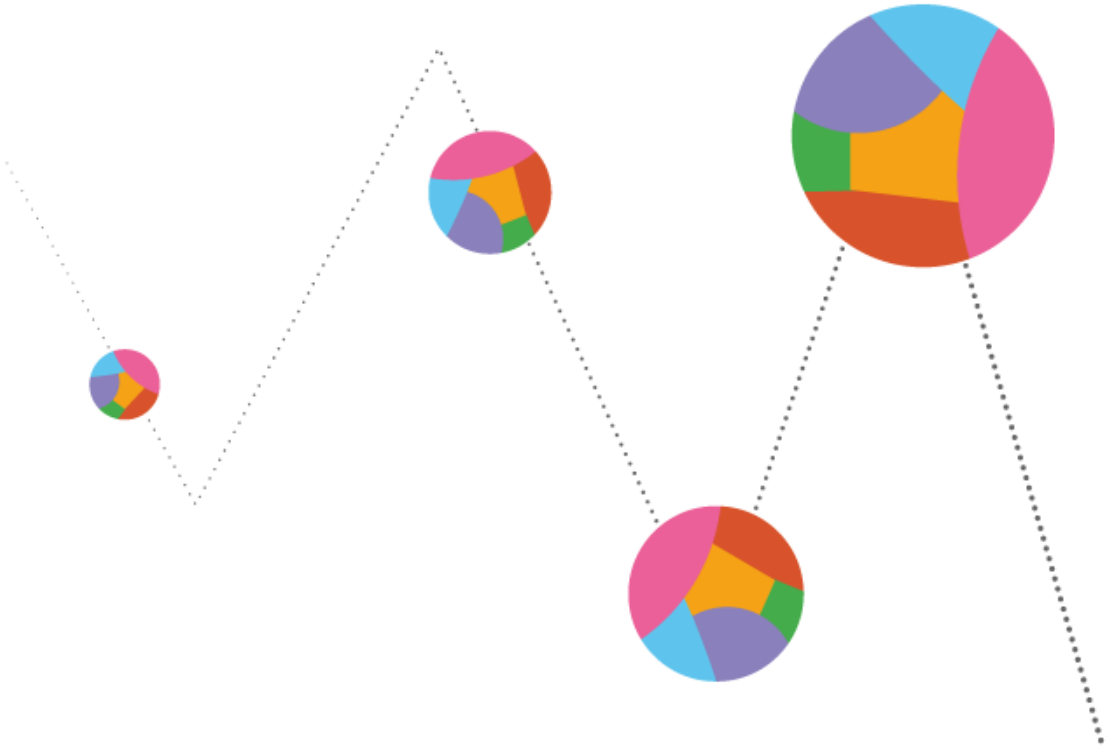

iFame
iFretta
iDeciso
iGradito
iSoldi
iFame
iFame
Fretta
iSoldi
iGradito
iFame
iFame
iFretta
iSoldi
iGradito


DESIGN
USE
FIELD-WORK
SEEDING THE COMMUNITY
PARTICIPATORY DESIGN
PARTICIPATORY DEVELOPMENT
iFame
ACTIVE ENGAGEMENT
REFLECTIVE CONTRIBUTION
CONTENT CONTRIBUTION
OPPORTUNISTIC USE
TECHNICAL INFRASTRUCTURING
SOCIAL INFRASTRUCTURING

OPPORTUNISTIC USE

USAGE DATA

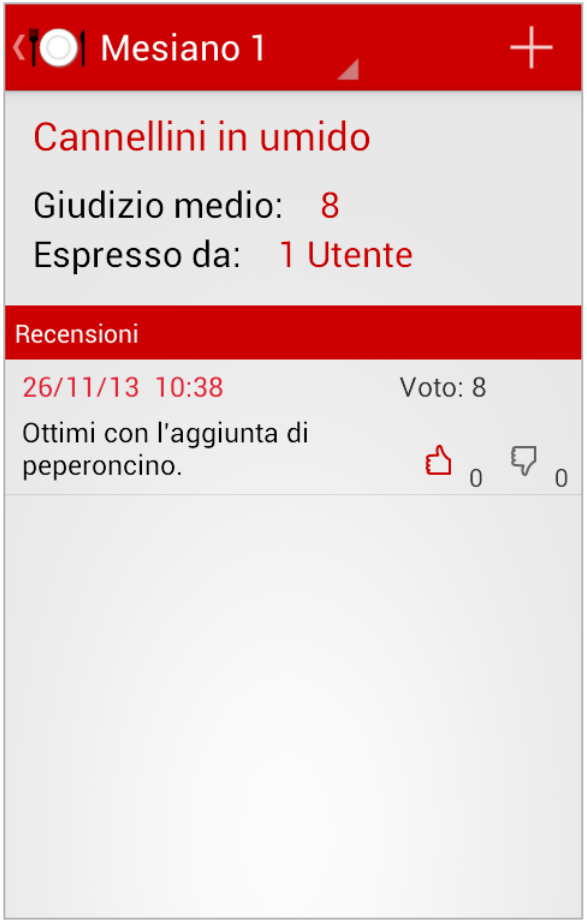

Global Stats
Daily usage of Smart Campus apps
API requests
500
400
300
200
100
0
Low usage
2. Dec
9. Dec
16. Dec
23. Dec
30. Dec
6. Jan
13. Jan
20. Jan
27. Jan
Inbox
MyCvs
ViaggiaTrento
LifeLog
ViviTrento
MyPeople
Other
iFame

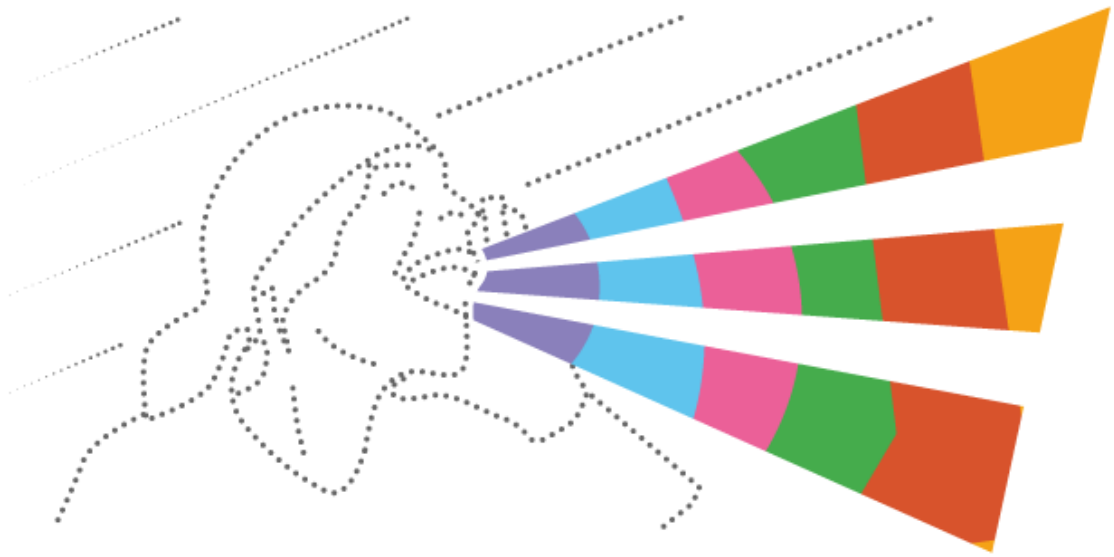


CONTENT CONTRIBUTION

iFame
iFame
iFretta
iSoldi
iGradito

martedì 07 gennaio 2014
MENÙ DEL GIORNO
ALTERNATIVE
Primi
Kcal
Crema di porri
168
Pasta ricotta e zucchine
424
Pasta cacio e pepe
582
Secondi
Kcal
Scaloppina alla boscaiola (misto bosco)
468
Bocconcini di tacchino alle spezie
152
Contorni
Kcal
Patate fritte/al forno
292


Mesiano 1
Cannellini in umido
Giudizio medio: 8
Espresso da: 1 Utente
Recensioni
26/11/13 10:38
Voto: 8
Ottimi con l'aggiunta di peperoncino.
0
0



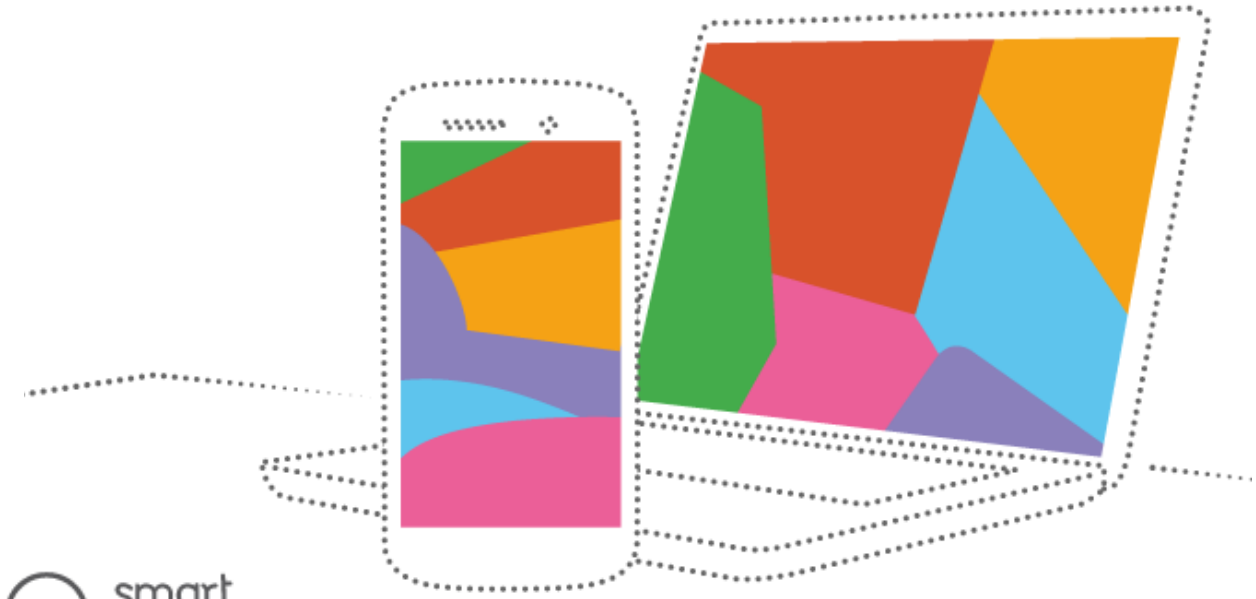
REFLECTIVE CONTRIBUTION

"*The presence of kcal values could be useful for other purposes. If we create a history of what we eat, then it will be possible to create a health profile with suggestions if someone doesn't want to exceed with kcals*",
Functionality2: "*Create a history of our usage, in order to track our money*"

"*I agree... maybe with a timer like 'next update in'* + *progress bar in order to improve the interaction and dynamicity of the section*"

"*Anyway the code is redundant […] I think it is better to rewrite the code introducing a method to retrieve the correct case like /*it is pseudo-code and I hope that the prices are correct*/ if amount > 4.90 return 0;if amount > 3.90 return 1;if amount > 3.10 return 2;if amount > 0 return 3;return -1;*"

ACTIVE ENGAGEMENT



13 March 2014

COMMUNICATION CHANNELS

Where we are

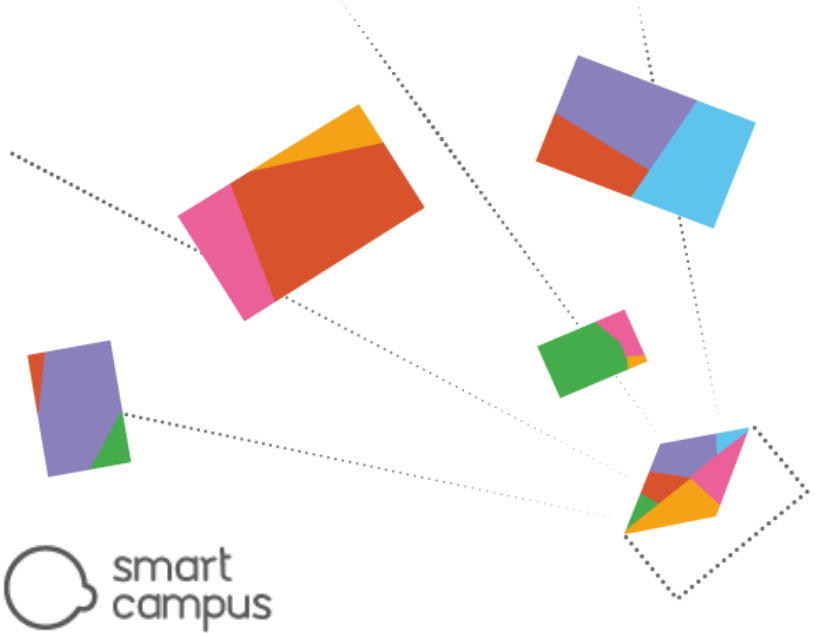
- Facebook
  - https://www.facebook.com/smartcampuslab
- Our Online Forum
  - http://www.smartcampuslab.it/forum/index.php
- Our website
  - http://www.smartcampuslab.it/

Where we are

- Twitter
  - @smartcampus_lab
- Google Plus
  - https://plus.google.com/+smartcampuslabIT/posts
- LinkedIn
  - http://goo.gl/kcn2MZ

Where we are

- YouTube
  - http://www.youtube.com/channel/UCKM0WM4tuql9xm-jjRIsRFg
- GitHub
  - https://github.com/smartcampuslab



Thank you!

Via alla Cascata 56C
Povo di Trento, 38123
Italy

info@smartcampuslab.it

www.smartcampuslab.it

Follow **Smart Campus Lab** :