

Oltre le Aule di Ingegneria del Software: Studio Etnografico a 42 Firenze



Dott.

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Dott. Ric.

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Prof.

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UNIVERSITÀ
DEGLI STUDI
FIRENZE

DINFO

DIPARTIMENTO DI
INGEGNERIA DELL'INFORMAZIONE



Software
Technologies
Laboratory

Chi siamo



Corsi di Laurea Triennale e Magistrale in Ingegneria Informatica

Chi siamo



Corsi di Laurea Triennale e Magistrale in Ingegneria Informatica



Skills:

- Competenza di astrazione teorica e formale
- Capacità di modellazione software
- Pensiero critico per l'applicazione sistematica dello stato dell'arte

Sbocchi professionali:

Analista, architetto e progettista di sistemi software

Chi siamo



Insegnamento:

- **Fondamenti di informatica**
- **Ingegneria del software**
- **Architetture e metodologie software**
- **Valutazione quantitativa per modelli stocastici**

e altro...

Ricerca:

- **Architetture software**
- **Edge to cloud computing**
- **Sistemi real-time e safety-critical**
- **Modellazione stocastica e valutazione quantitativa**

e altro...



Motivazioni

► Perché proprio 42?

- **Diffusione globale:** 54 campus
- **Metodo didattico innovativo:** no lezioni frontali
- **Mix unico di approcci pedagogici moderni**



Motivazioni

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▶ Forte interesse della comunità accademica



Motivazioni

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► Forte interesse della comunità accademica

► Contesto:

- **Forte domanda:** settore tecnologico continua espansione
- **Settore in continua evoluzione:** rapido ritmo di avanzamento tecnologico
- **Limiti dell'educazione tradizionale:** esigenze degli studenti

*Qual è l'effetto del metodo 42
sull'apprendimento del software
da parte degli studenti?*

Qual è l'effetto del metodo 42 sull'apprendimento del software da parte degli studenti?



Problem-Based
Learning



Gamification



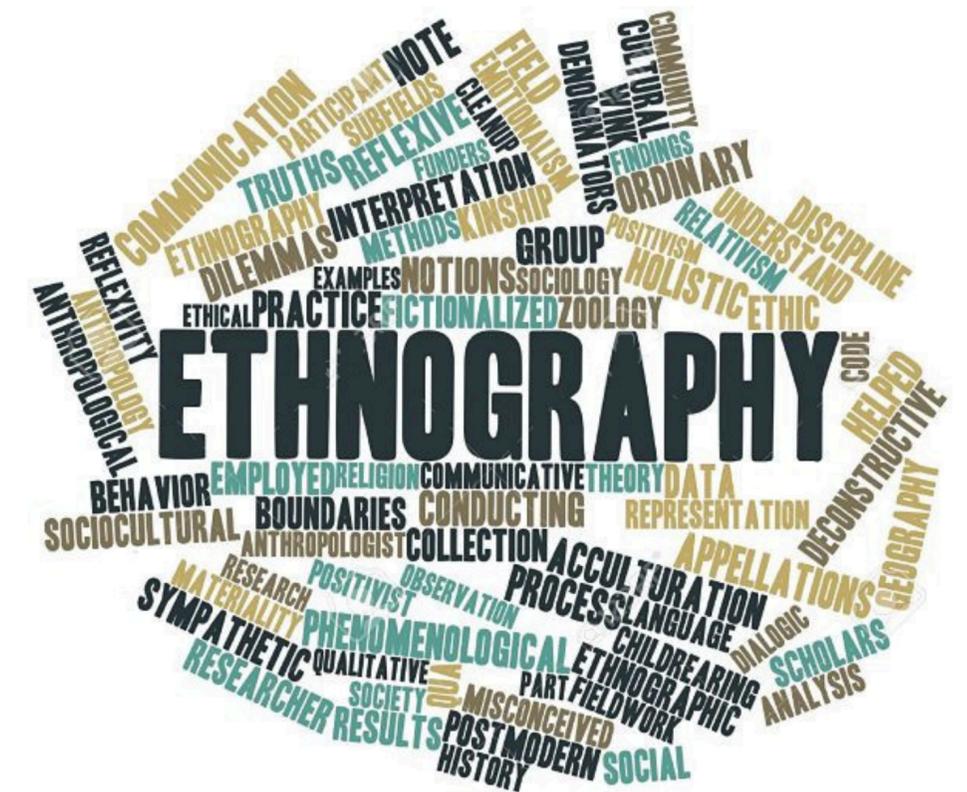
Peer
Pedagogy



Community
Development

Etnografia

- **Immersione completa nella comunità**
 - ➔ Comprendere la complessità del metodo
- **Accesso diretto a esperienze cruciali**
 - ➔ Colpo d'occhio sulla quotidianità degli studenti
- **Prospettiva interna**
 - ➔ Punto di vista degli studenti



Studio sul campo

Durata: 6 mesi
Ruolo: Studenti
Attività: Piscine, progetti, eventi, svago



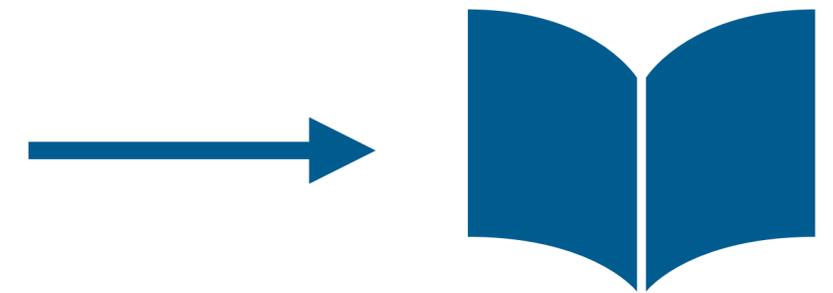
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Studio sul campo

Durata: 6 mesi
Ruolo: Studenti
Attività: Piscine, progetti, eventi, svago



Mappa tematica

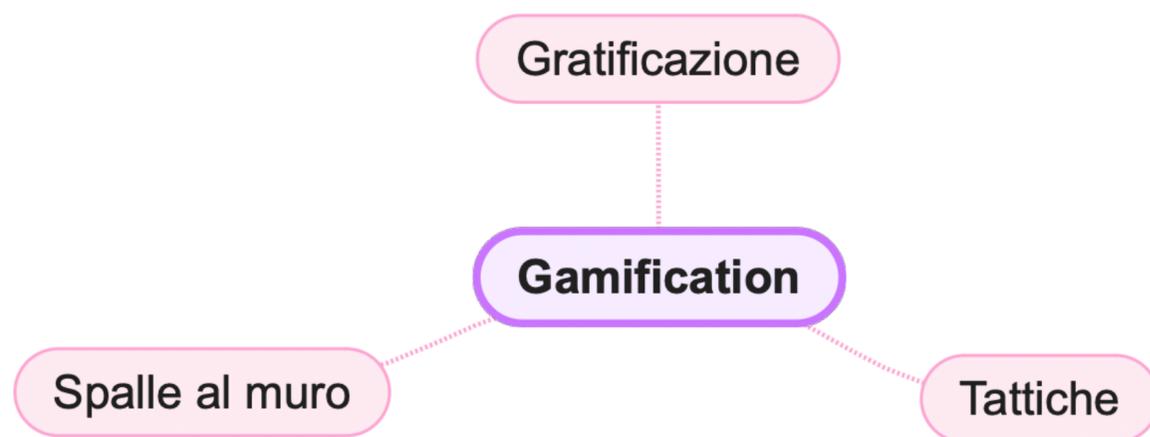
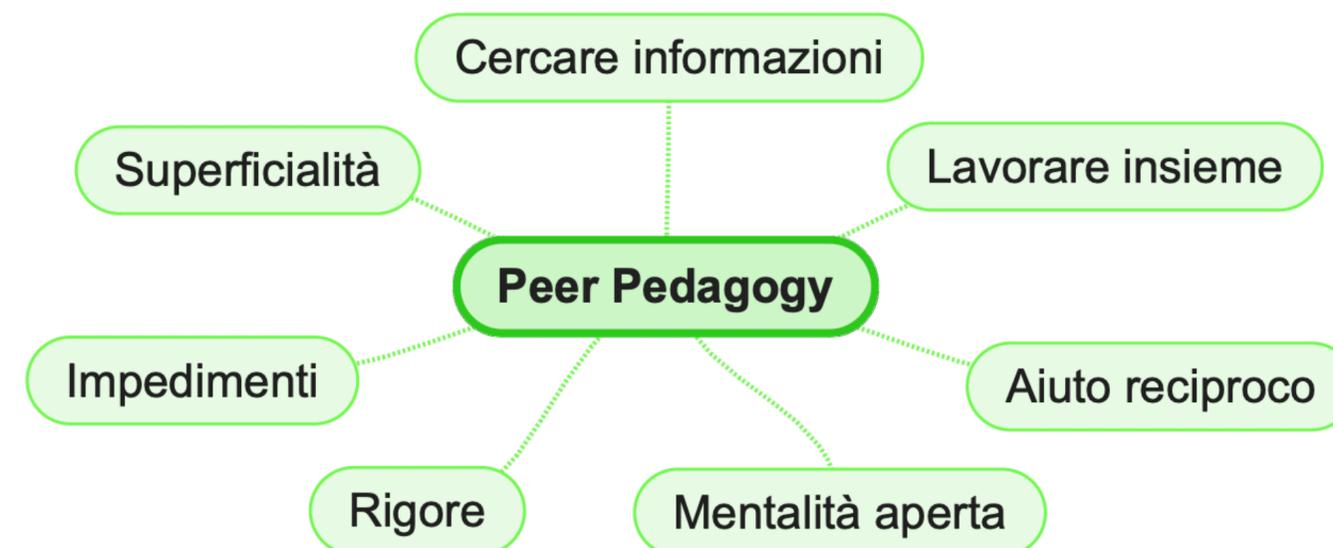
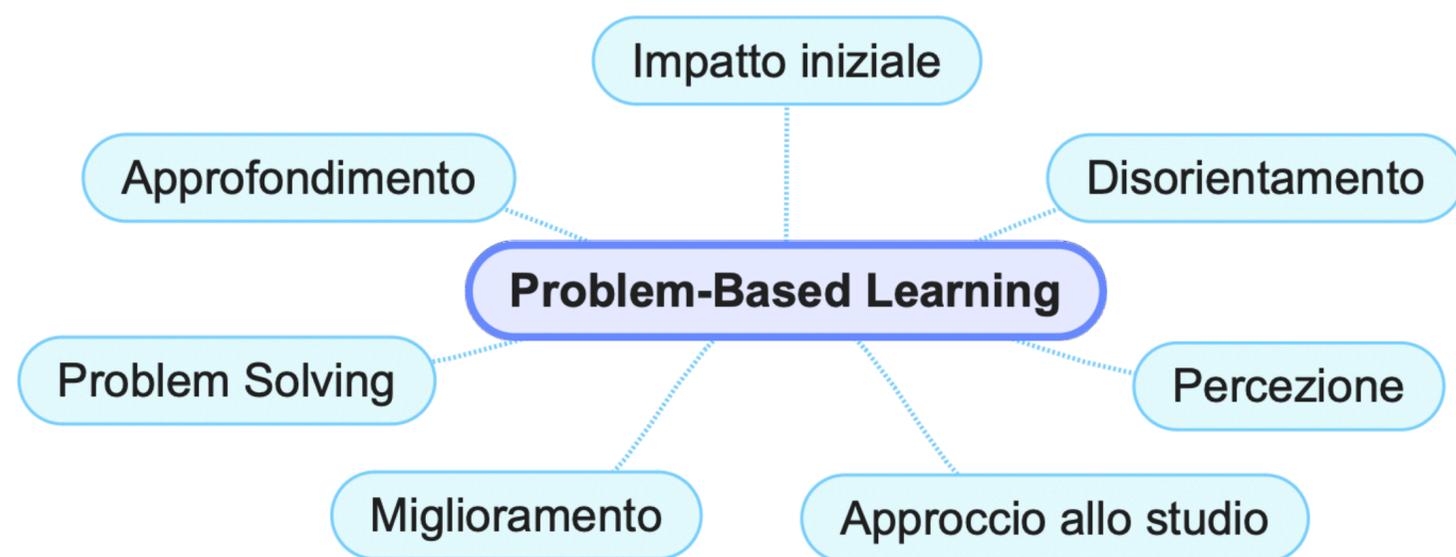
Problem-Based Learning

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Gamification

Community Development

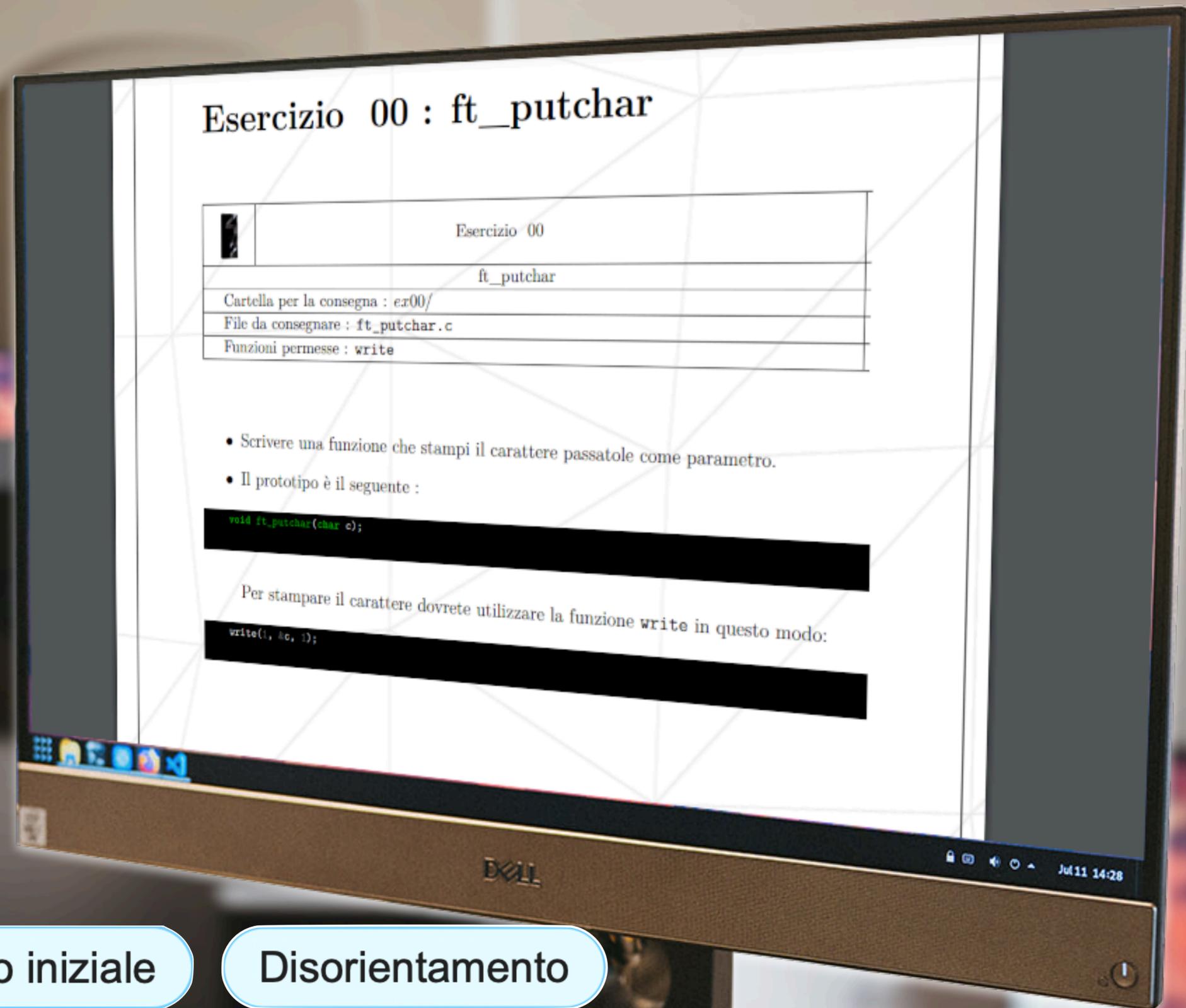
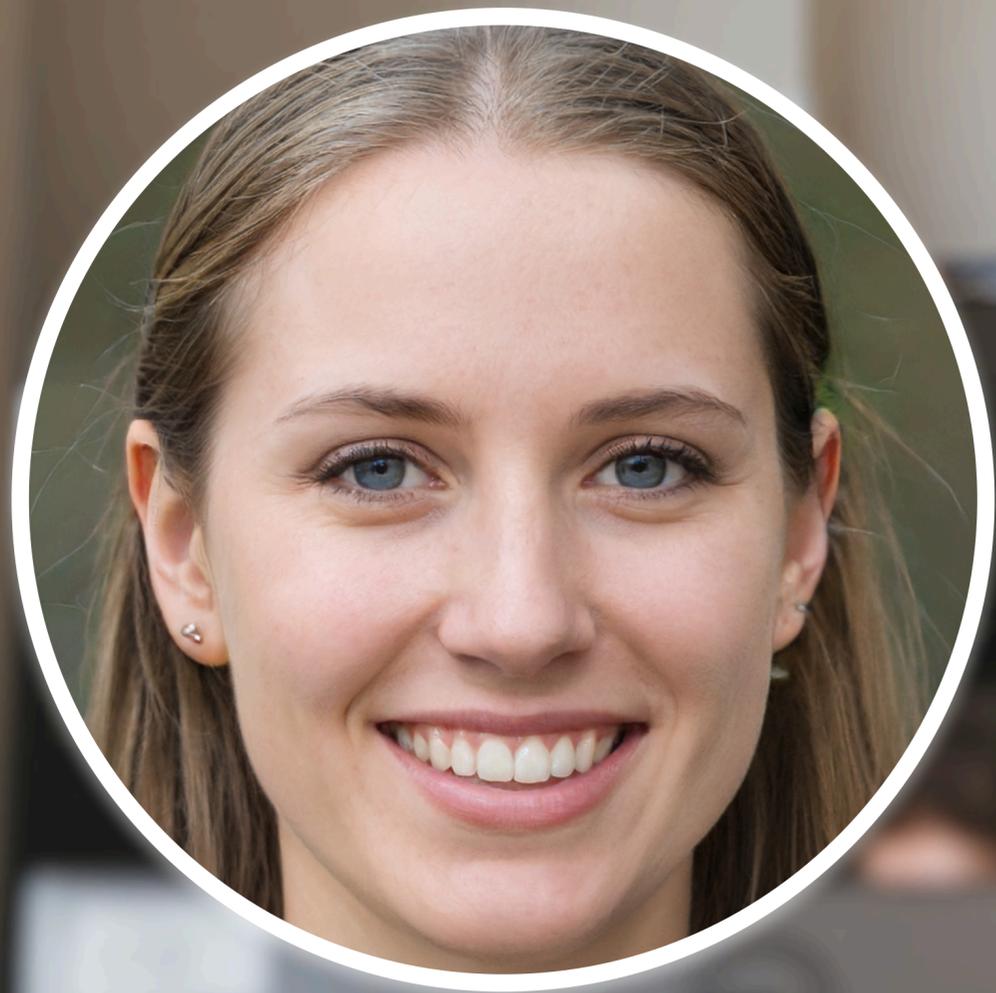
Mappa tematica











Impatto iniziale

Disorientamento

Esercizio 00 : ft_putchar

	Esercizio 00
	ft_putchar
	Cartella per la consegna : <i>ex00/</i>
	File da consegnare : <i>ft_putchar.c</i>
	Funzioni permesse : <i>write</i>

- Scrivere una funzione che stampi il carattere passato come parametro.
- Il prototipo è il seguente :

```
void ft_putchar(char c);
```

Per stampare il carattere dovrete utilizzare la funzione `write` in questo modo:

```
write(1, &c, 1);
```

Impatto iniziale

Disorientamento



Esercizio 00 : ft_putchar

- Dubbi o domande? Chiedi a chi si trova alla tua destra, altrimenti a chi si trova alla tua sinistra
- Your reference guide is called Google / man / the Internet /

- Scrivere una funzione che stampi il carattere passato come parametro.
- Il prototipo è il seguente :

```
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```

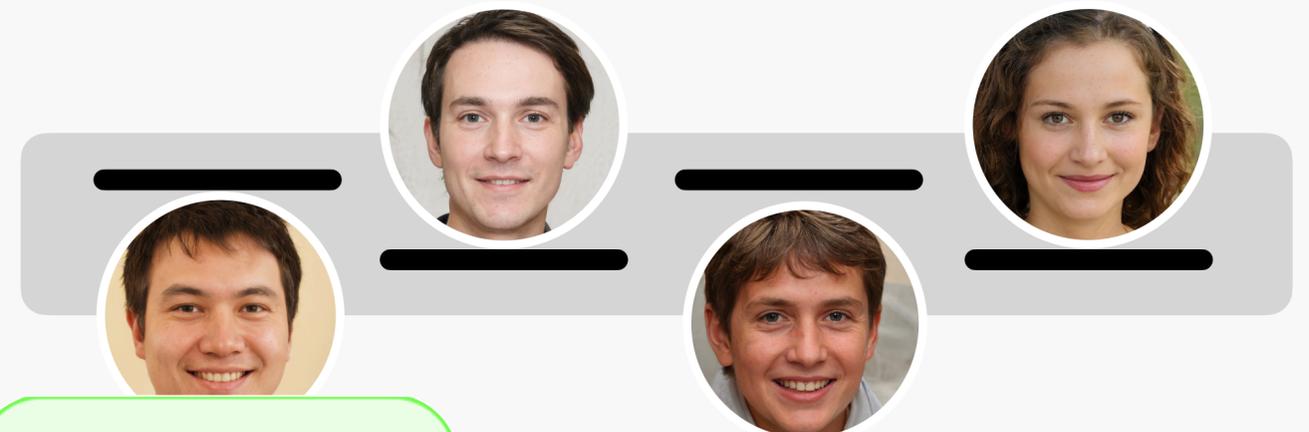
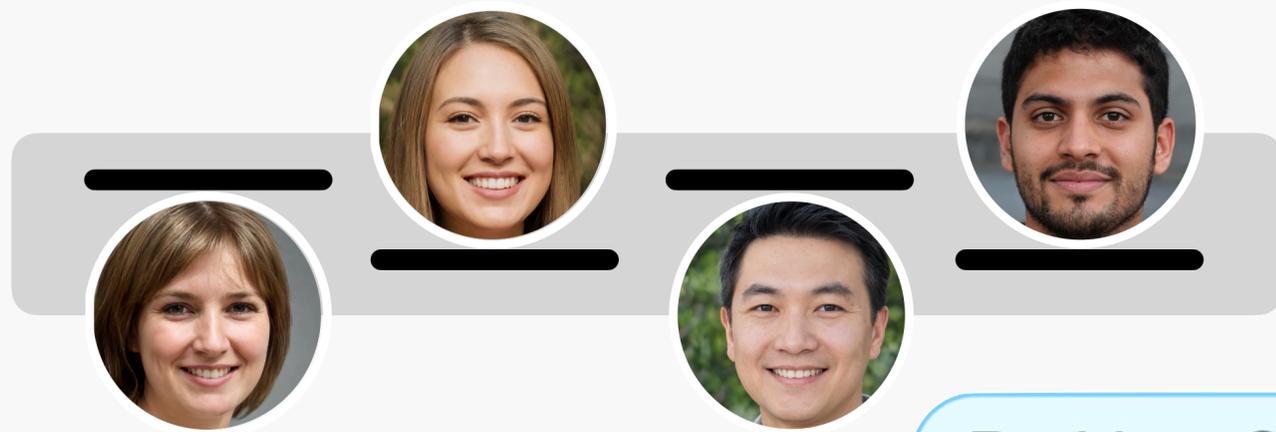
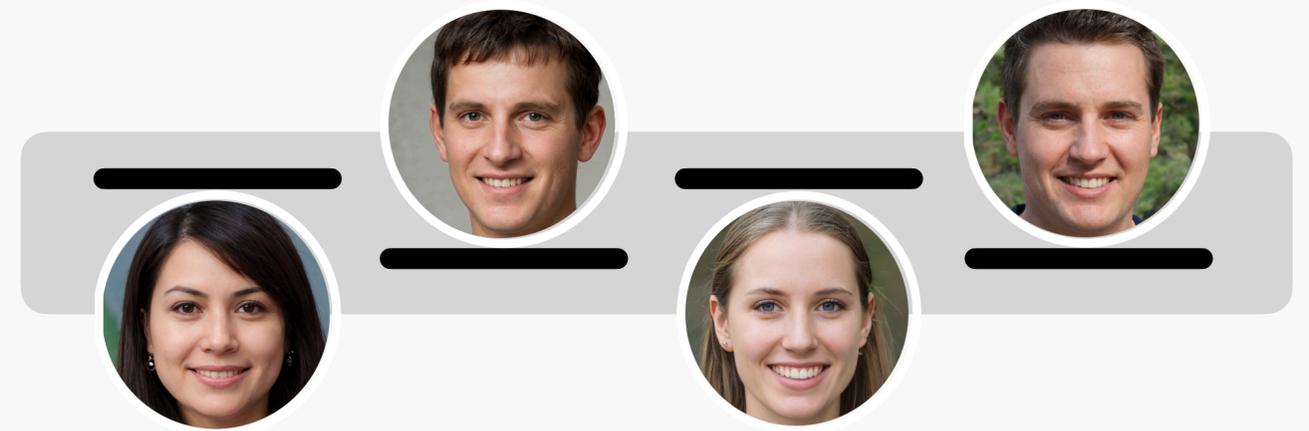
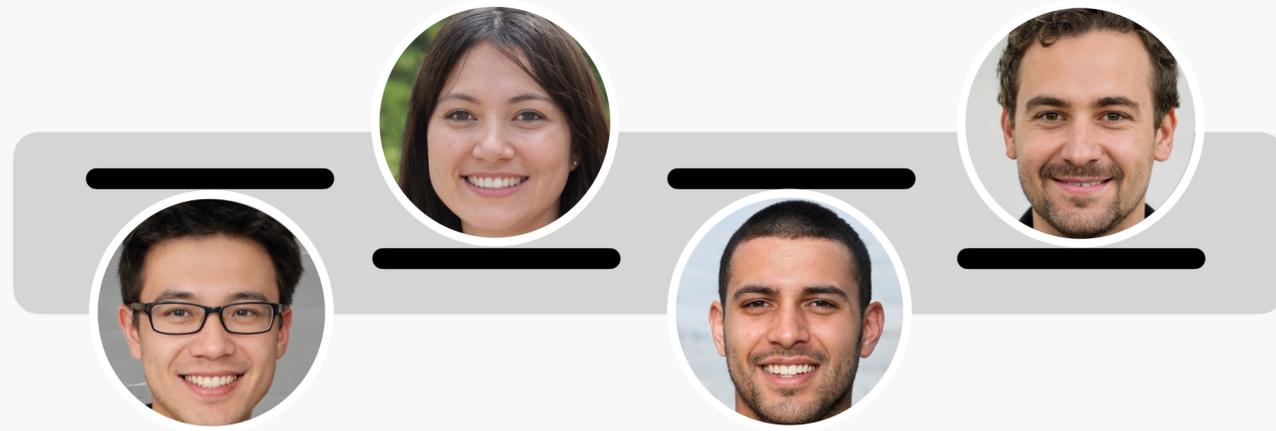
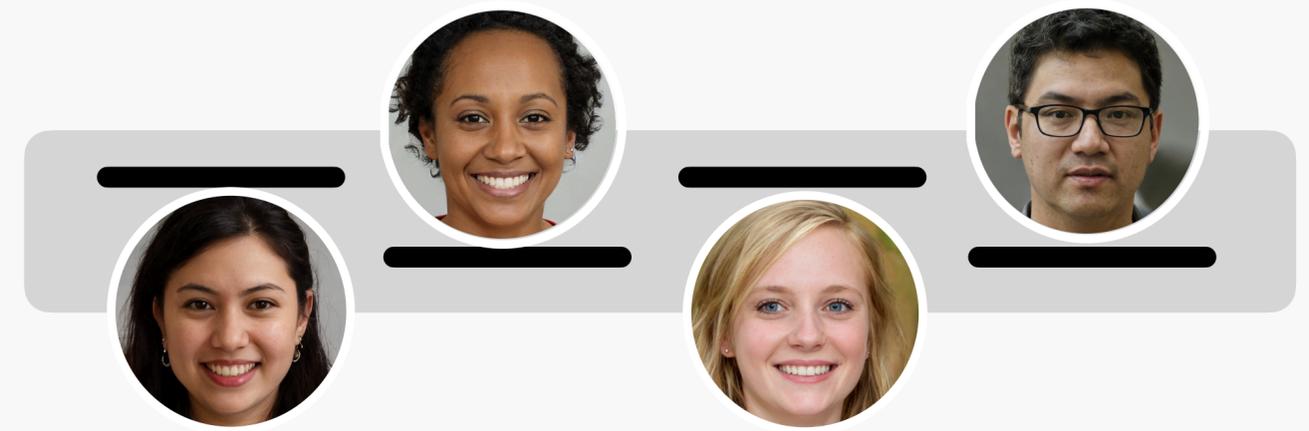
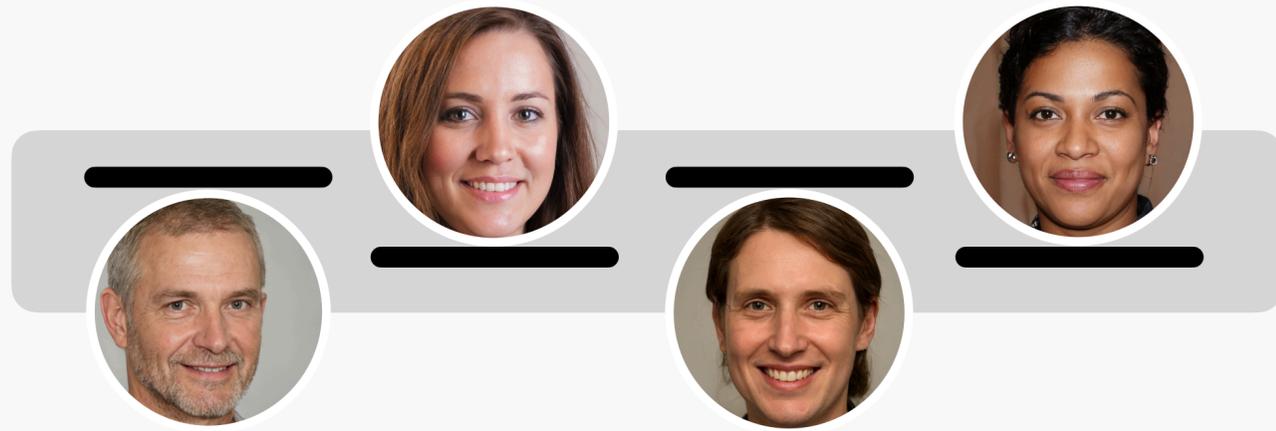
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Impatto iniziale

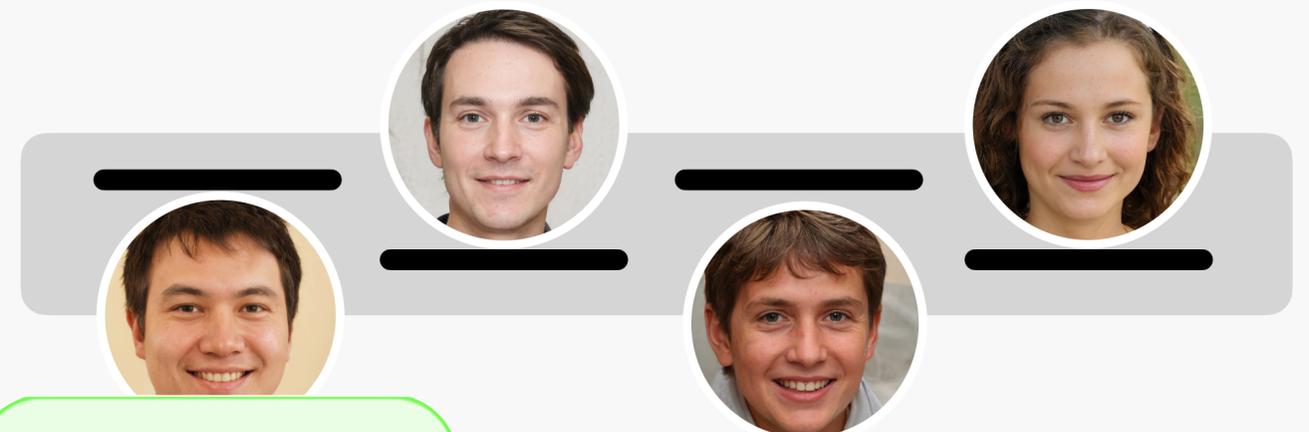
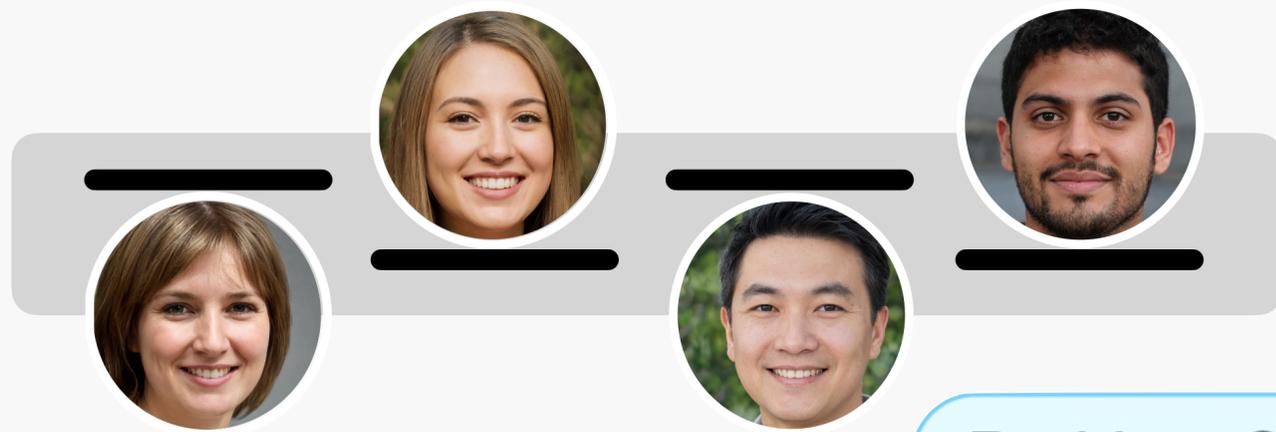
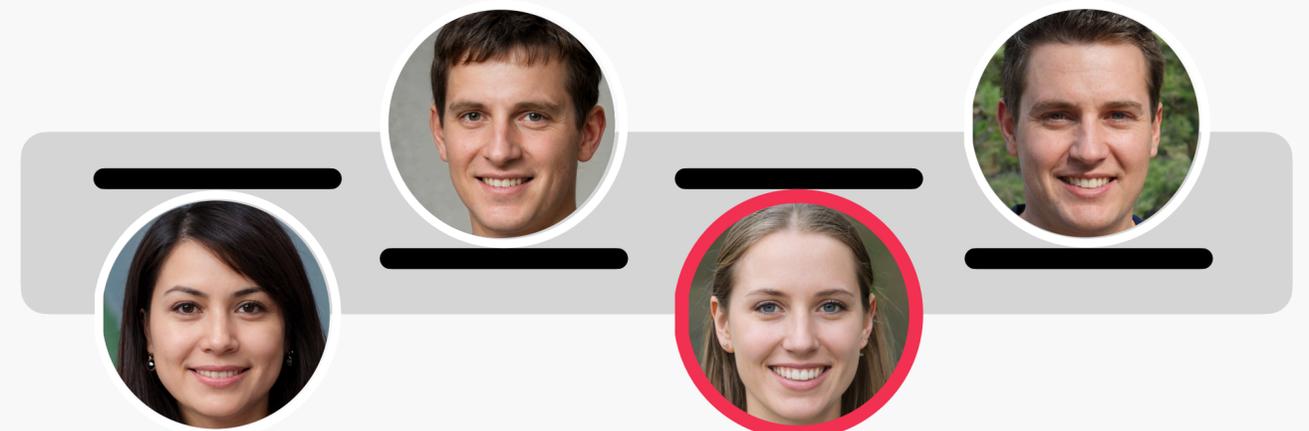
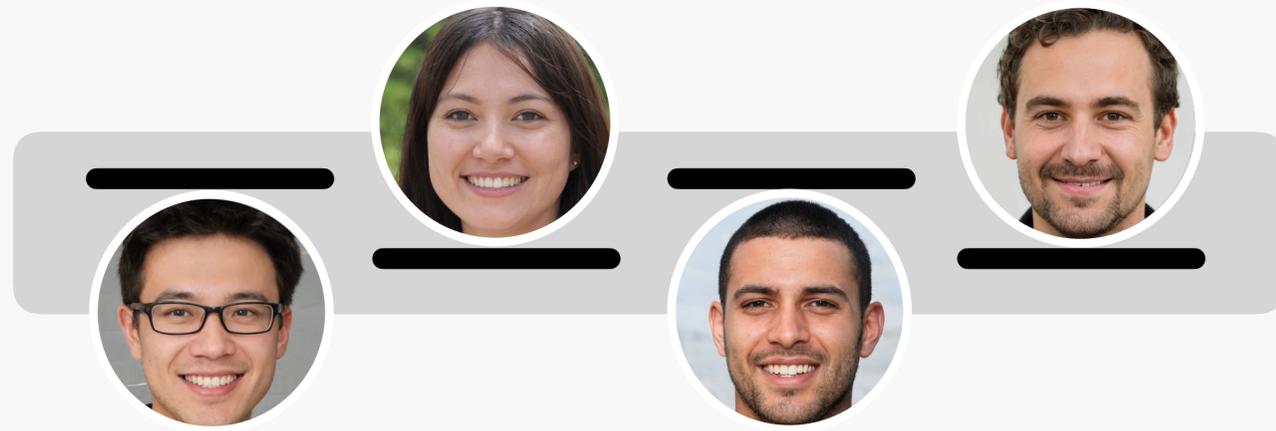
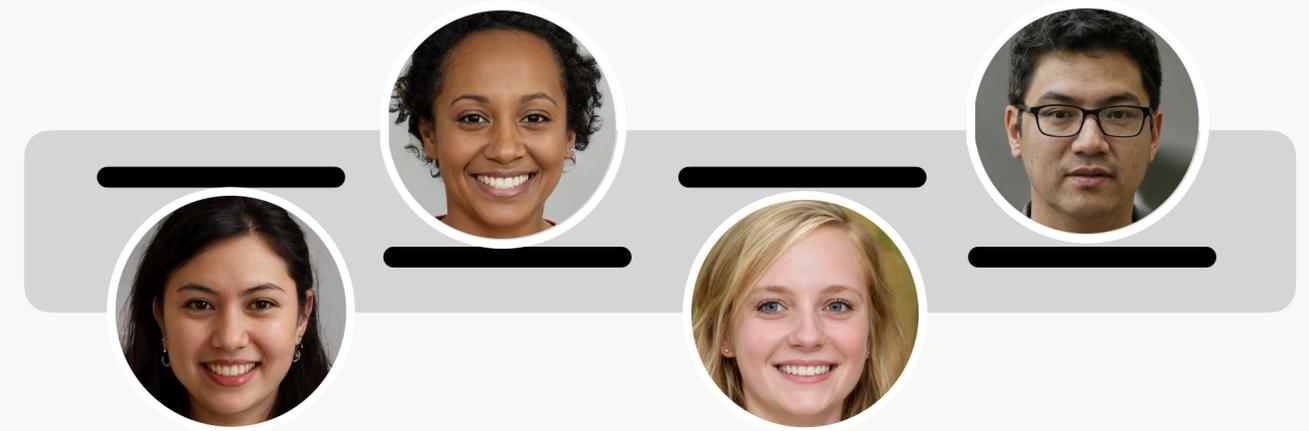
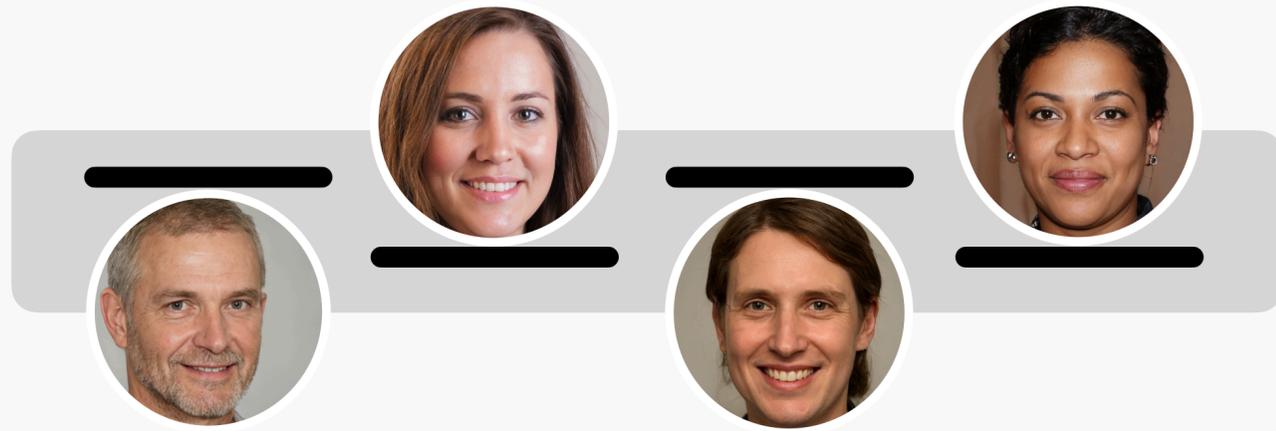
Disorientamento





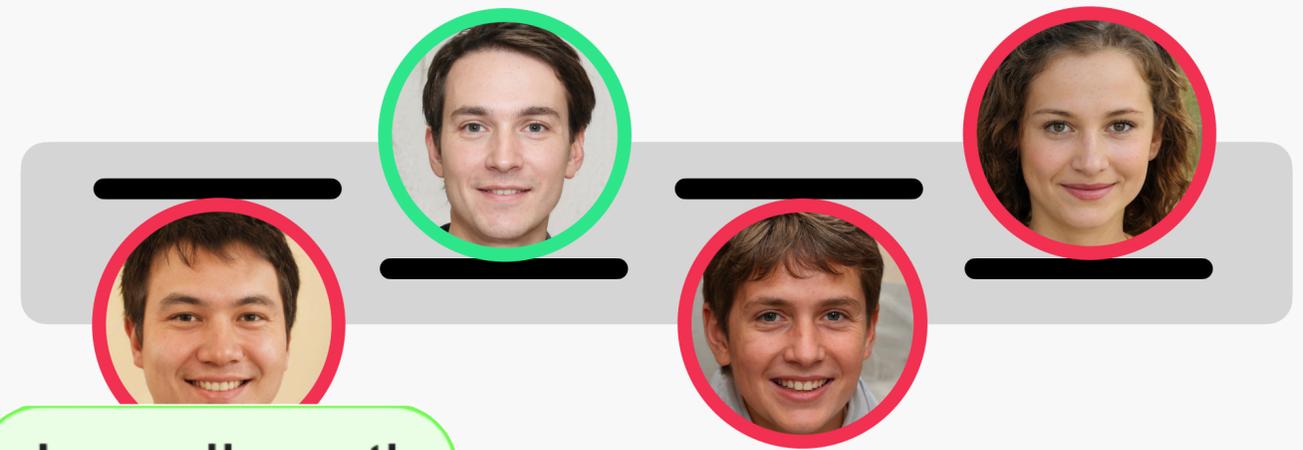
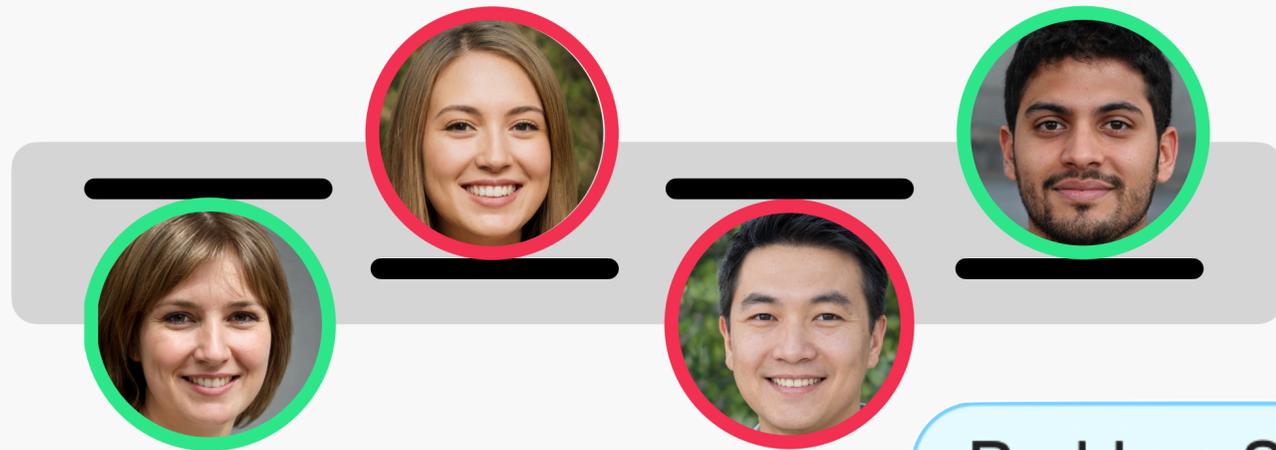
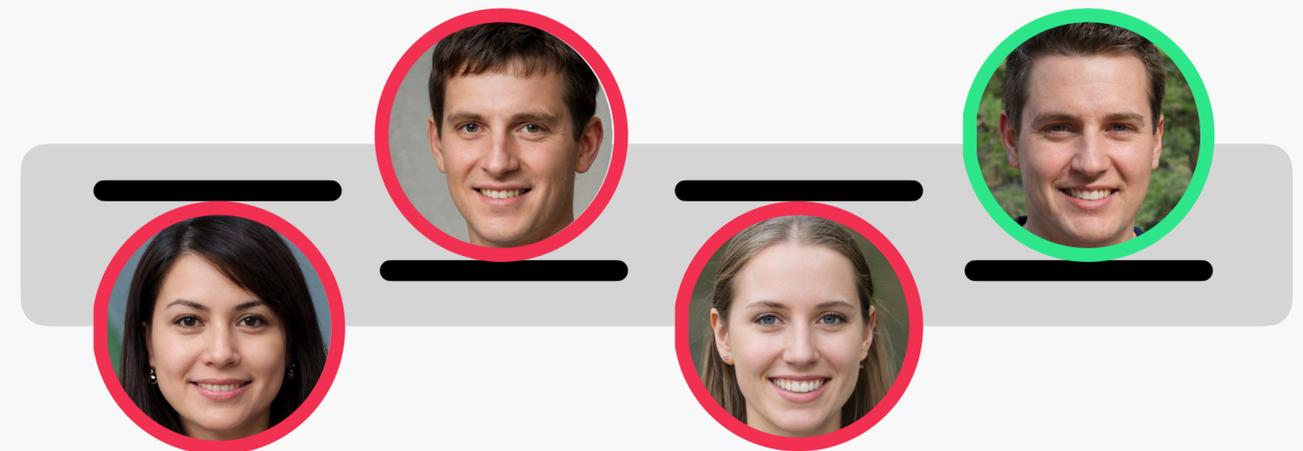
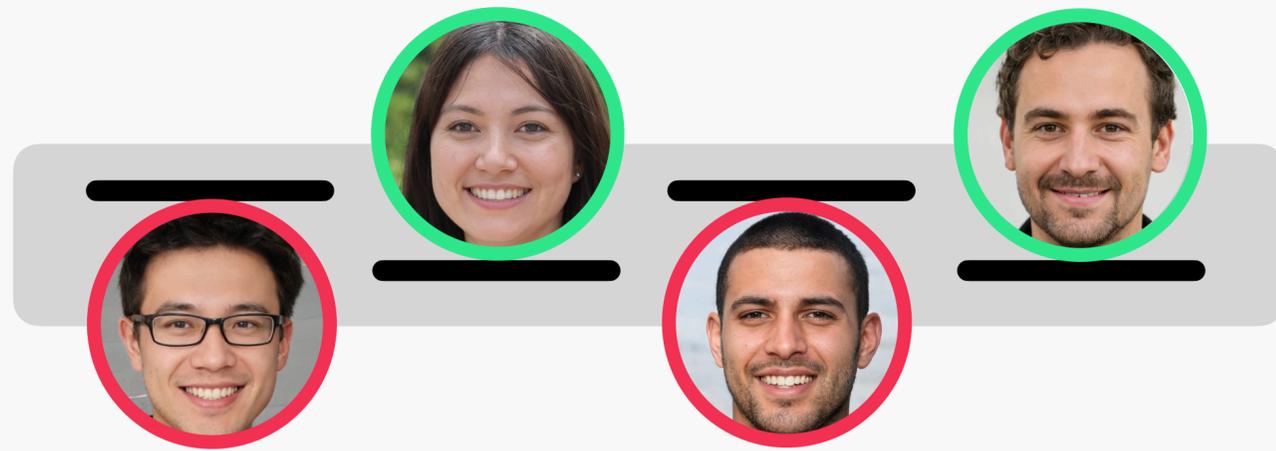
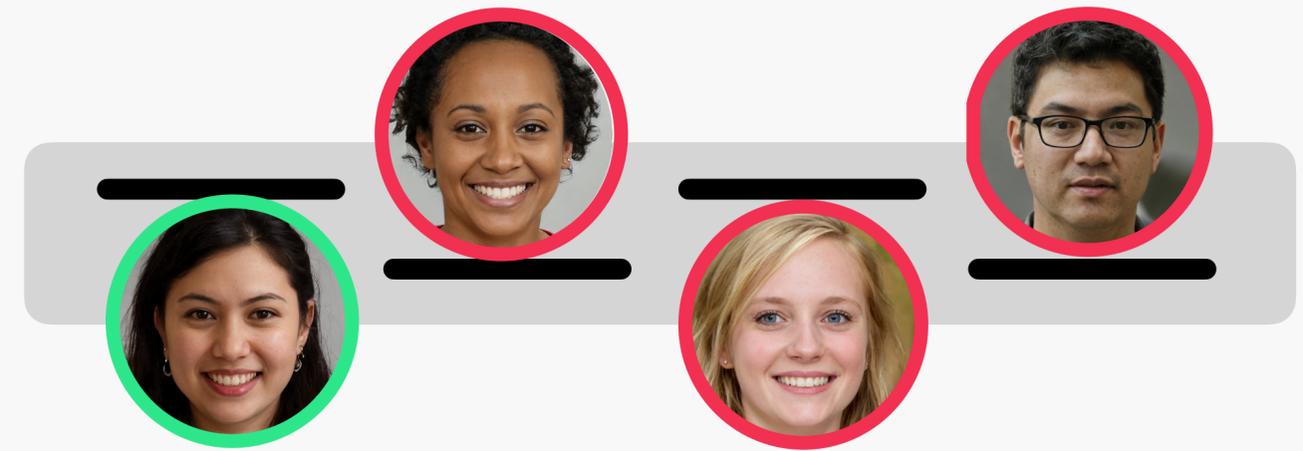
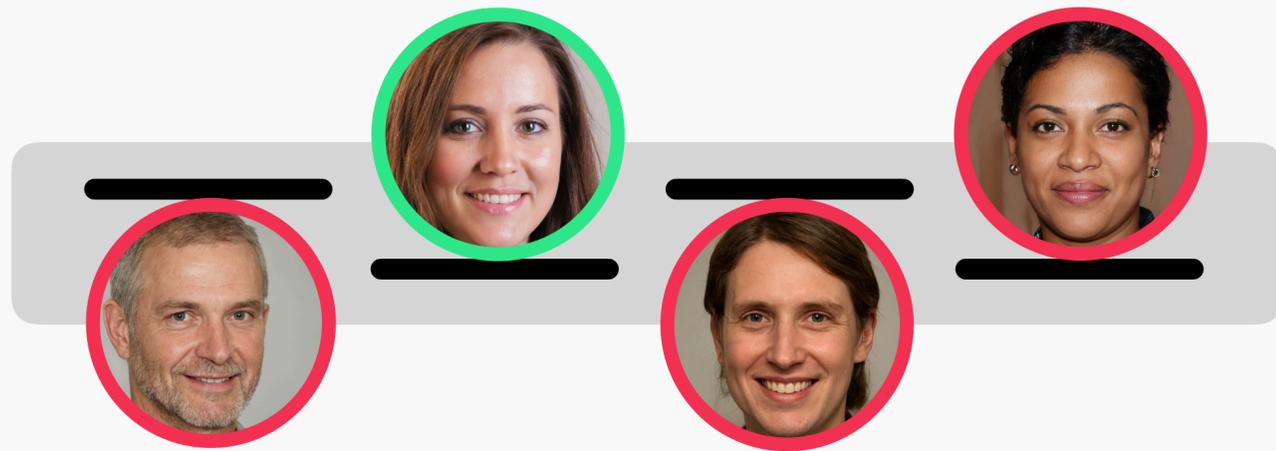
Problem Solving

Impedimenti



Problem Solving

Impedimenti



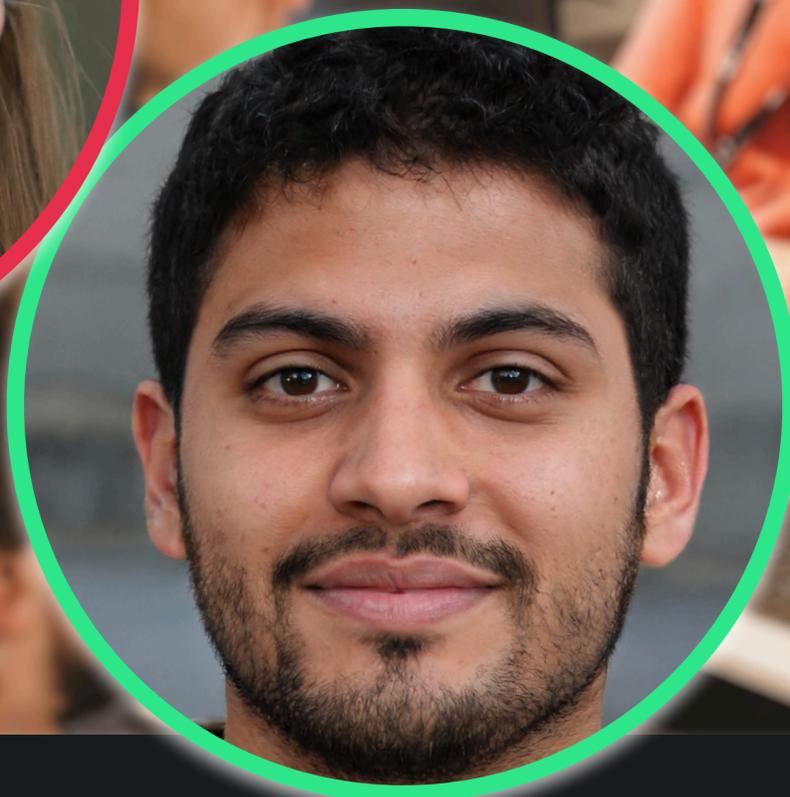
Problem Solving

Impedimenti



Aiuto reciproco

Mentalità aperta



✓ success

90 /100

Solo – about 1 day – 100 XP

🕒 You have 1 day to evaluate this project after setting the project as finished

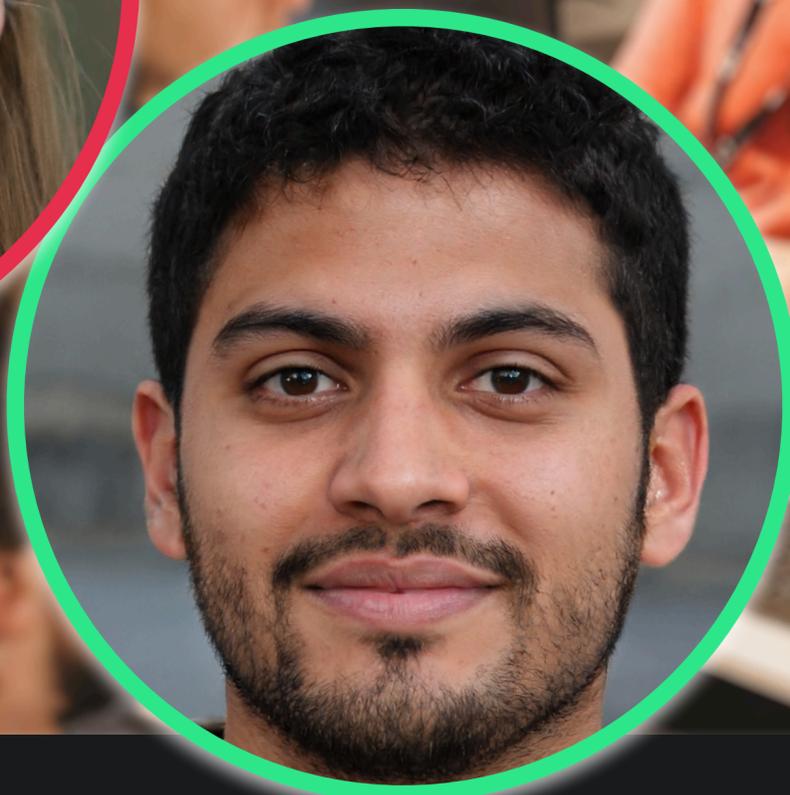
👤 Peer evaluations (2/2)



EVALUATED BY **LIBALIN**

✓ 90%

Tutto bene a parte l'ultimo esercizio :)



✓ success

70 /100

Solo – about 1 day – 100 XP

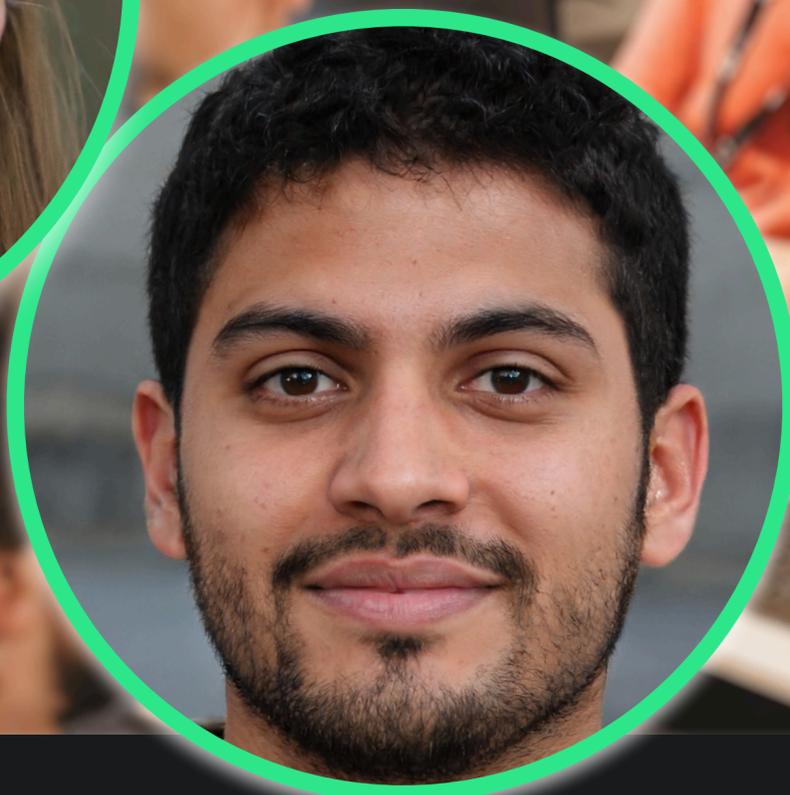
🕒 You have 1 day to evaluate this project after setting the project as finished

🔄 Automatic evaluations

EVALUATED BY MOULINETTE

📈 70%

ex00: OK | ex01: OK | ex02: OK | ex03: OK | ex04: OK | ex05: OK | ex06: KO | ex07: KO | ex08: KO



✓ success

70 /100

Solo – about 1 day – 100 XP

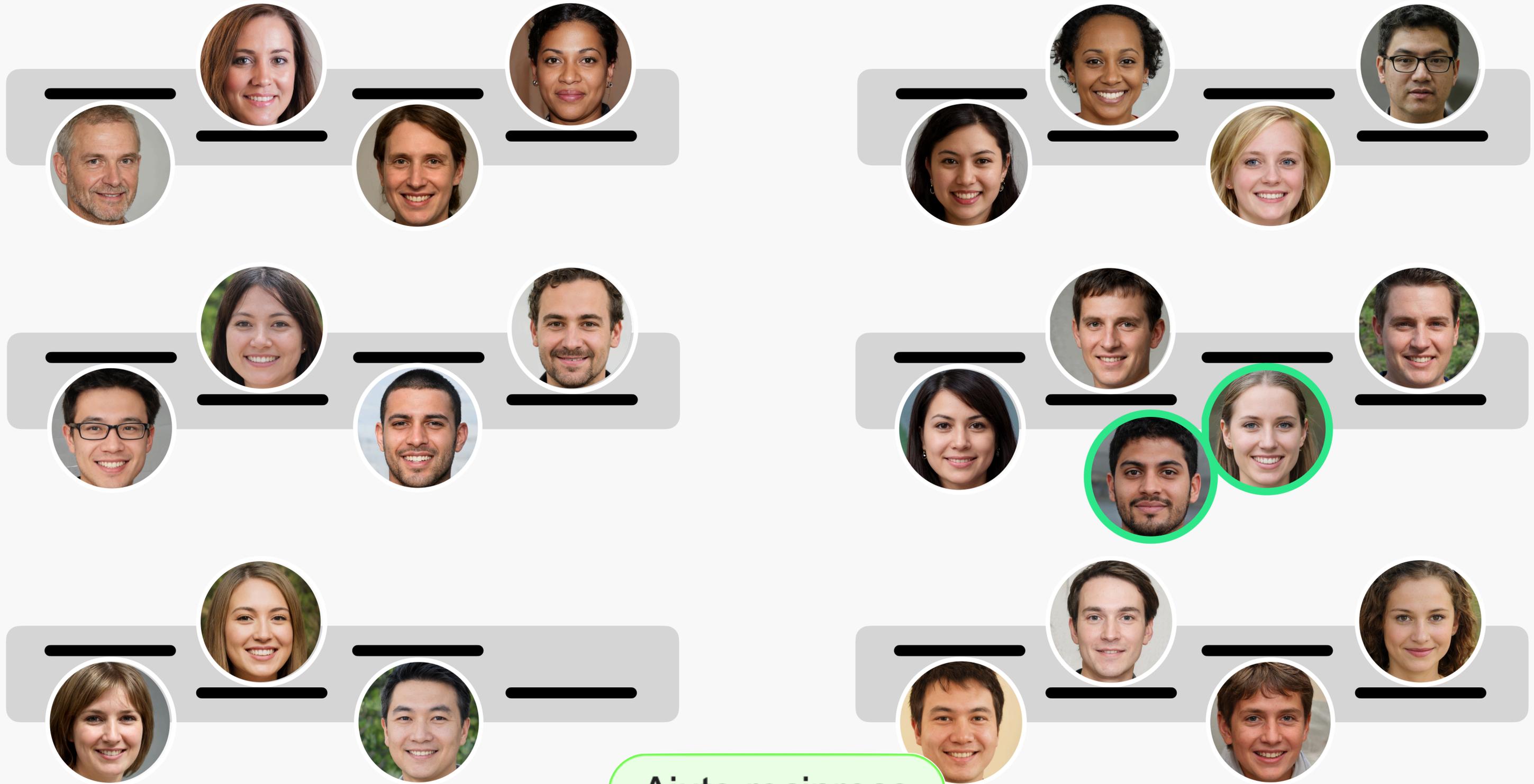
🕒 You have 1 day to evaluate this project after setting the project as finished

🔄 Automatic evaluations

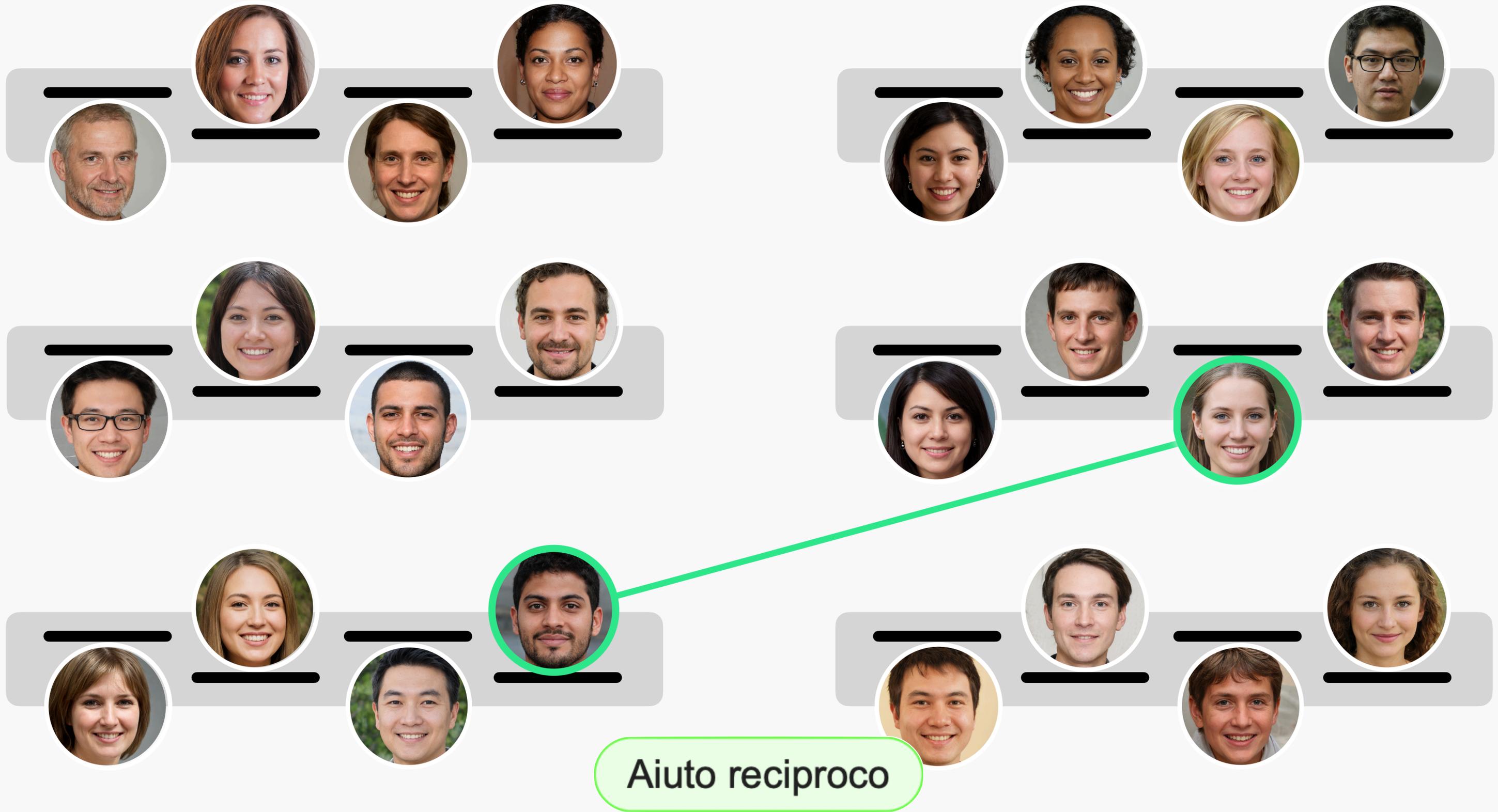
EVALUATED BY MOULINETTE

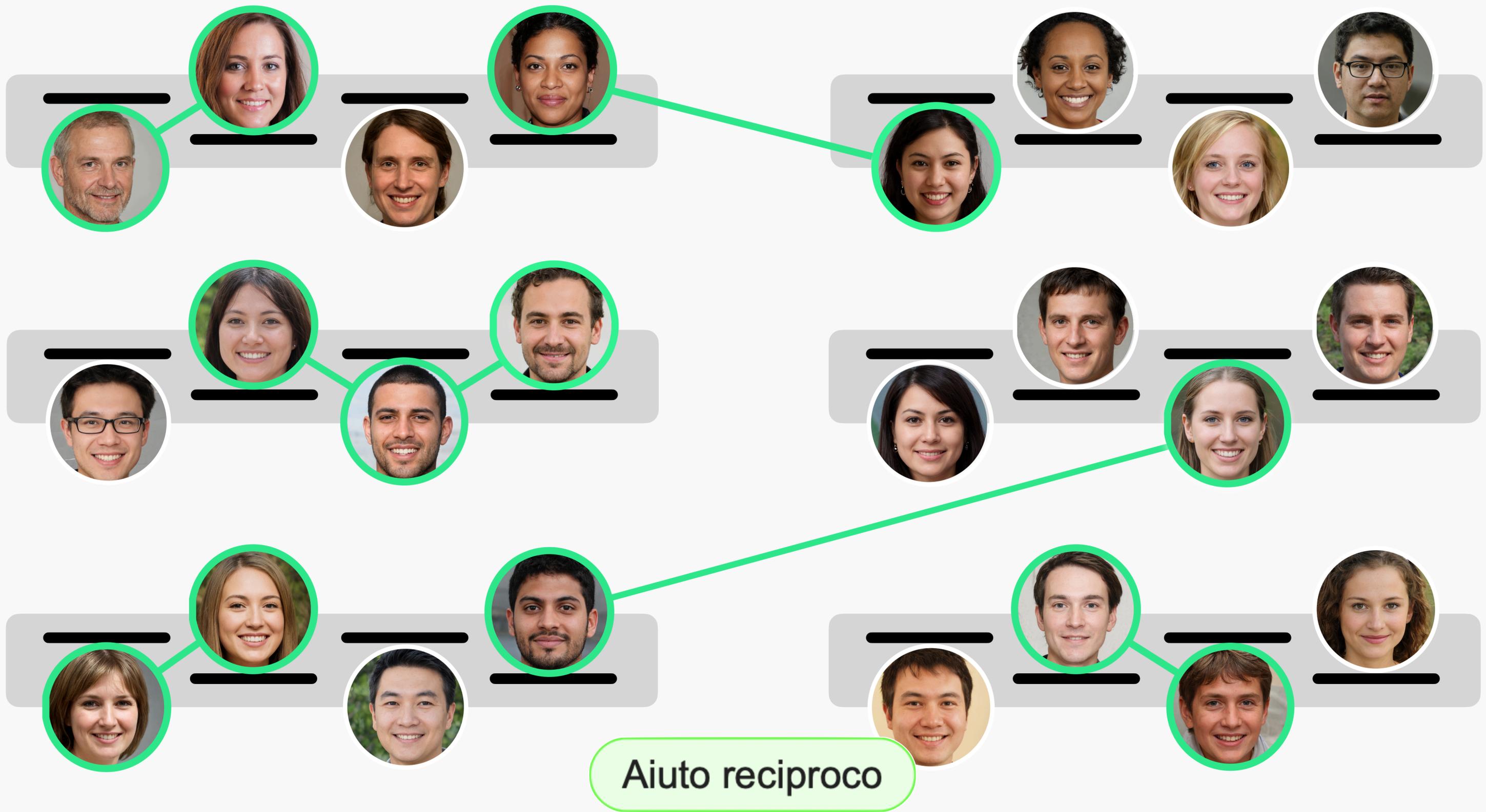
📈 70%

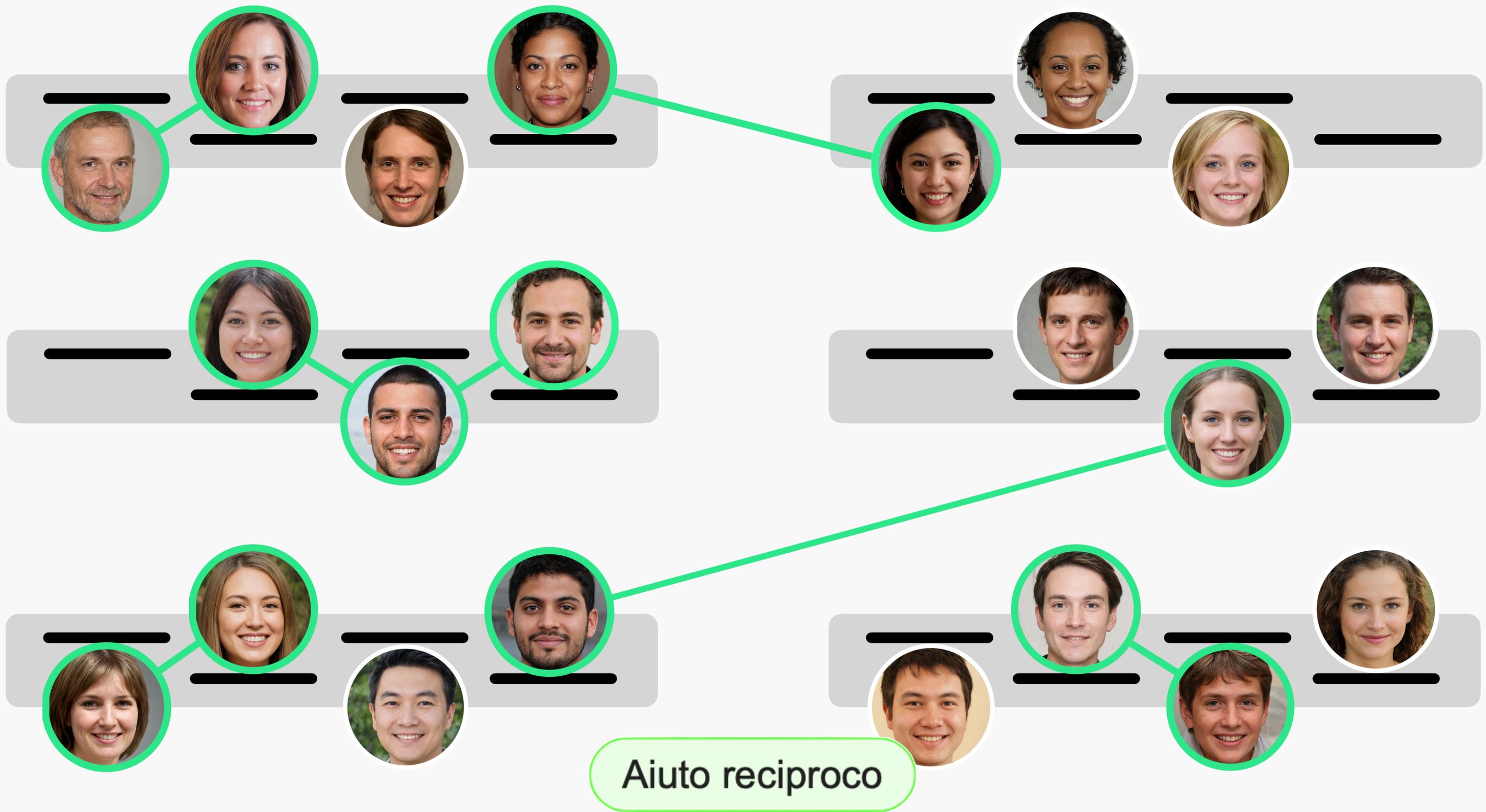
ex00: OK | ex01: OK | ex02: OK | ex03: OK | ex04: OK | ex05: OK | ex06: KO | ex07: KO | ex08: KO



Aiuto reciproco







The screenshot displays a software development interface for a project titled "libalin's C Piscine C 00 (1 retry)". The interface is dark-themed and includes several key elements:

- Project Status:** A red box on the left indicates a "fail" with a score of "0/100". Below this, it states "Solo - about 1 day - 100 XP" and "You have 1 day to evaluate this project after setting the project as finished".
- Team Information:** The team is "libalin's group", which was "locked 1 day ago and closed 1 day ago".
- Git Repository:** A text box shows the repository path: "git@vogosphere.42firenze.it:vogosphere/intra-uuid-cca8a219-070e-47fa-8760-294d0161eb3b-!".
- Evaluations:** A section titled "EVALUATIONS" shows "Automatic evaluations" and a status of "EVALUATED BY MOULINETTE" with a "0%" completion rate. Below this, a row of test results is displayed: "ex00: KO | ex01: KO | ex02: KO | ex03: KO | ex04: KO | ex05: KO | ex06: KO | ex07: KO | ex08: KO".
- Code Editor:** On the right side, a code editor window shows a list of files including "updatedb.conf", "update-manager/", "update-notd.d/", "update-notifier/", "UPower/", "usb_nodeswitch.conf", "usb_nodeswitch.d/", "vdpau_wrapper.cfg", "vin/", "vtrgb", "wgetrc", "wodin.conf", "wpa_supplicant/", "X11/", "xdg/", and "zsh_command_not_found".
- Actions:** A "Retry" button is located at the bottom left of the main interface.

Problem Solving

Gratificazione

Miglioramento

libalin's C Piscine C 00 (5 retry) ⚙️

✖ fail

40/100

Solo – about 1 day – 100 XP

🕒 You have 1 day to evaluate this project after setting the project as finished

📄 subject.pdf

📺 videos

Retry

libalin's group 40%

This team was locked **1 day ago** and closed **1 day ago**

📁 GIT REPOSITORY

git@vogosphere.42firenze.it:vogsphere/intra-uuid-cca8a219-070e-47fa-8760-294d0161eb3b-!

☑ EVALUATIONS

🔄 Automatic evaluations

👤 EVALUATED BY MOULINETTE ⊗ 40%

ex00: OK | ex01: OK | ex02: OK | ex03: OK | ex04: KO | ex05: KO | ex06: KO | ex07: KO | ex08: KO

```
updatedb.conf
update-manager/
update-notd.d/
update-notifier/
UPower/
usb_nodeswitch.conf
usb_nodeswitch.d/
vdpau_wrapper.cfg
vin/
vtrgb
wgetrc
wodin.conf
wpa_supplicant/
X11/
xdg/
zsh_command_not_found
```

Problem Solving

Gratificazione

Miglioramento

libalin's C Piscine C 00 (7 retry) ⚙️

✓ success
60 /100

Solo – about 1 day – 100 XP

🕒 You have 1 day to evaluate this project after setting the project as finished

📄 subject.pdf
🔗 videos

Retry

libalin's group 60%

This team was locked 1 day ago and closed 1 day ago

📁 GIT REPOSITORY

git@vogosphere.42firenze.it:vogosphere/intra-uuid-cca8a219-070e-47fa

☑️ EVALUATIONS

🔄 Automatic evaluations

👤 EVALUATED BY MOULINETTE

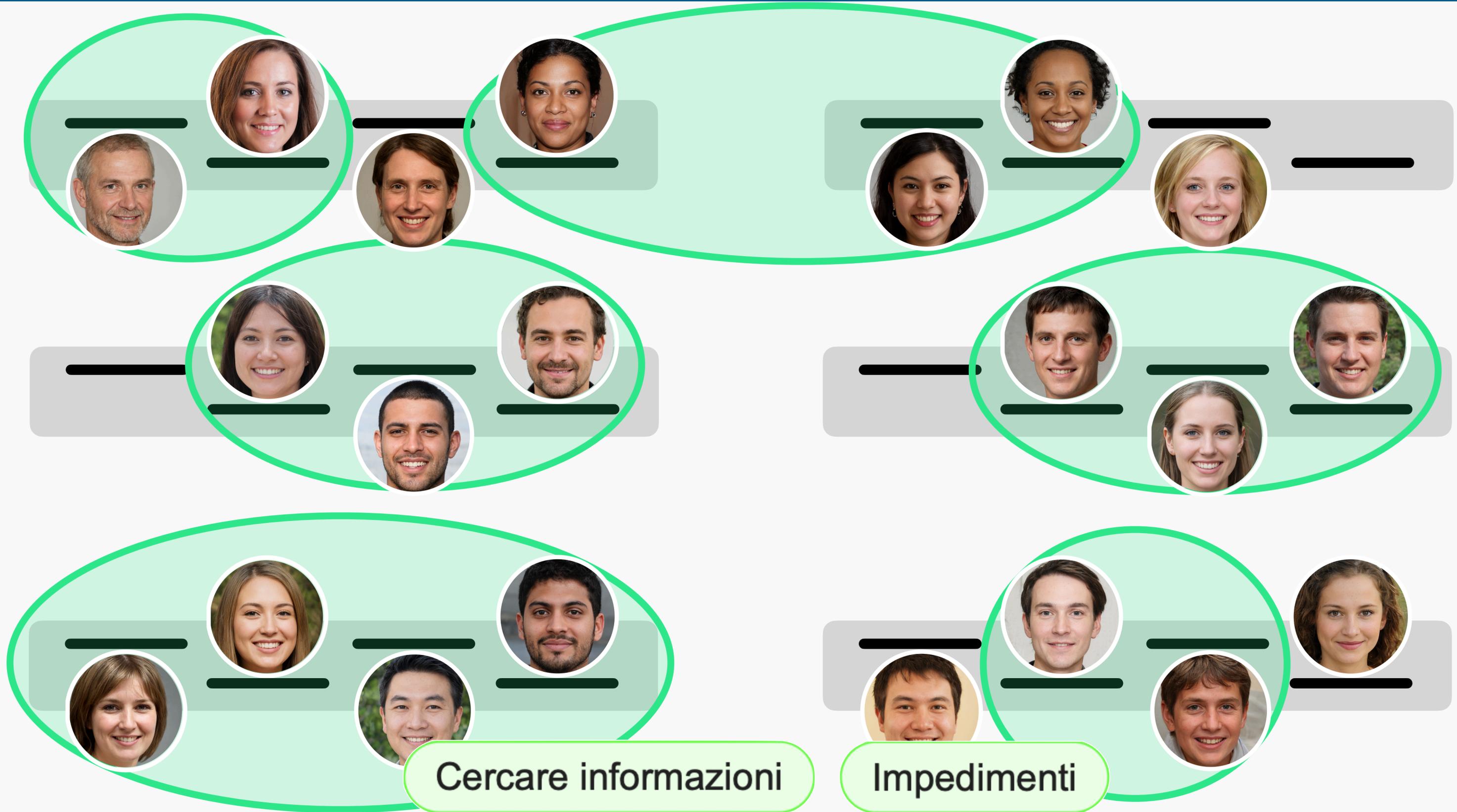
ex00: OK | ex01: OK | ex02: OK | ex03: OK | ex04: OK | ex05: OK | ex06: KO | ex07: KO | ex08: KO

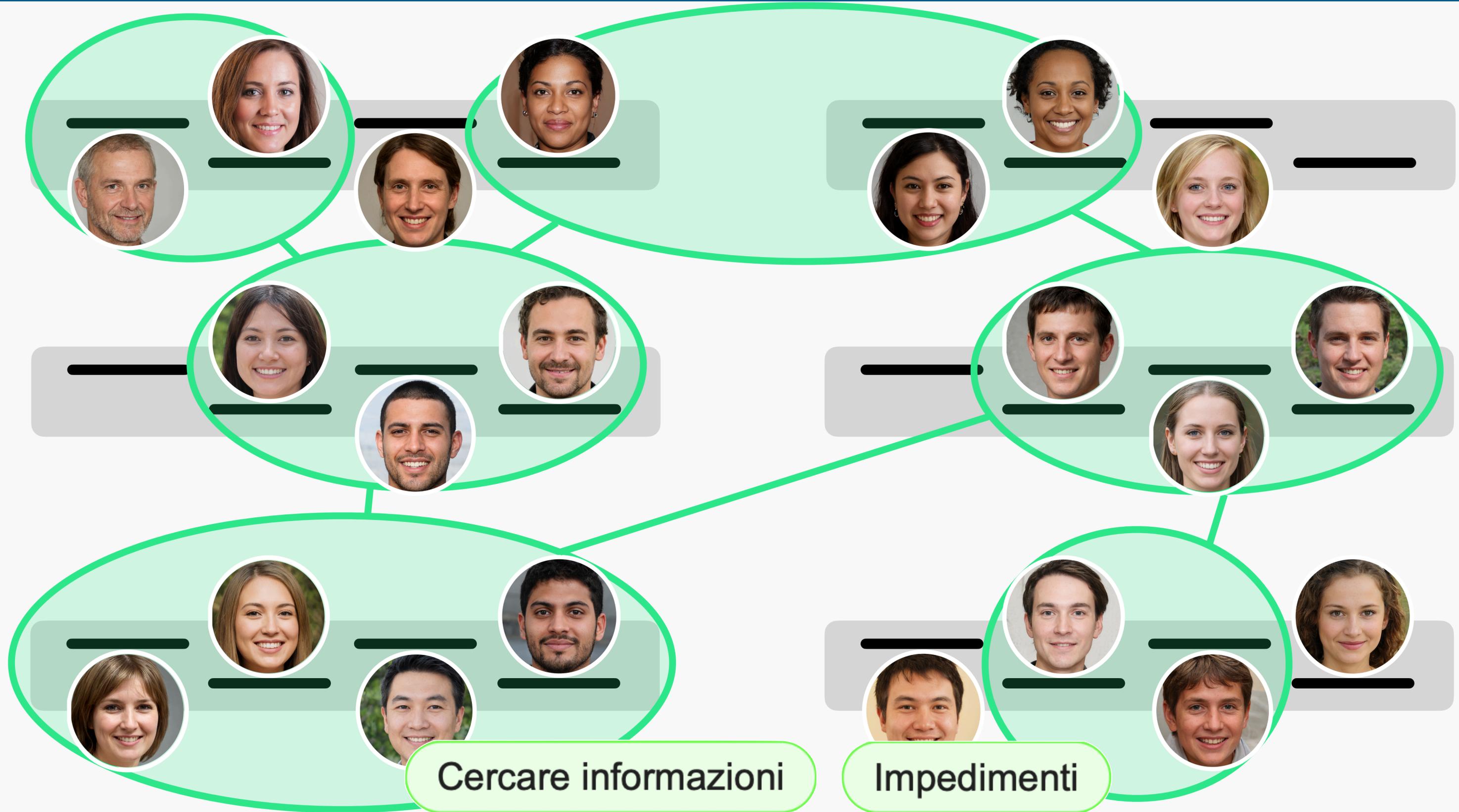
```
updatedb.conf
update-manager/
update-notd.d/
update-notifier/
UPower/
usb_nodeswitch.conf
usb_nodeswitch.d/
vdpau_wrapper.cfg
vin/
vtrgb
wgetrc
wodin.conf
wpa_supplicant/
X11/
xdg/
zsh_command_not_found
```

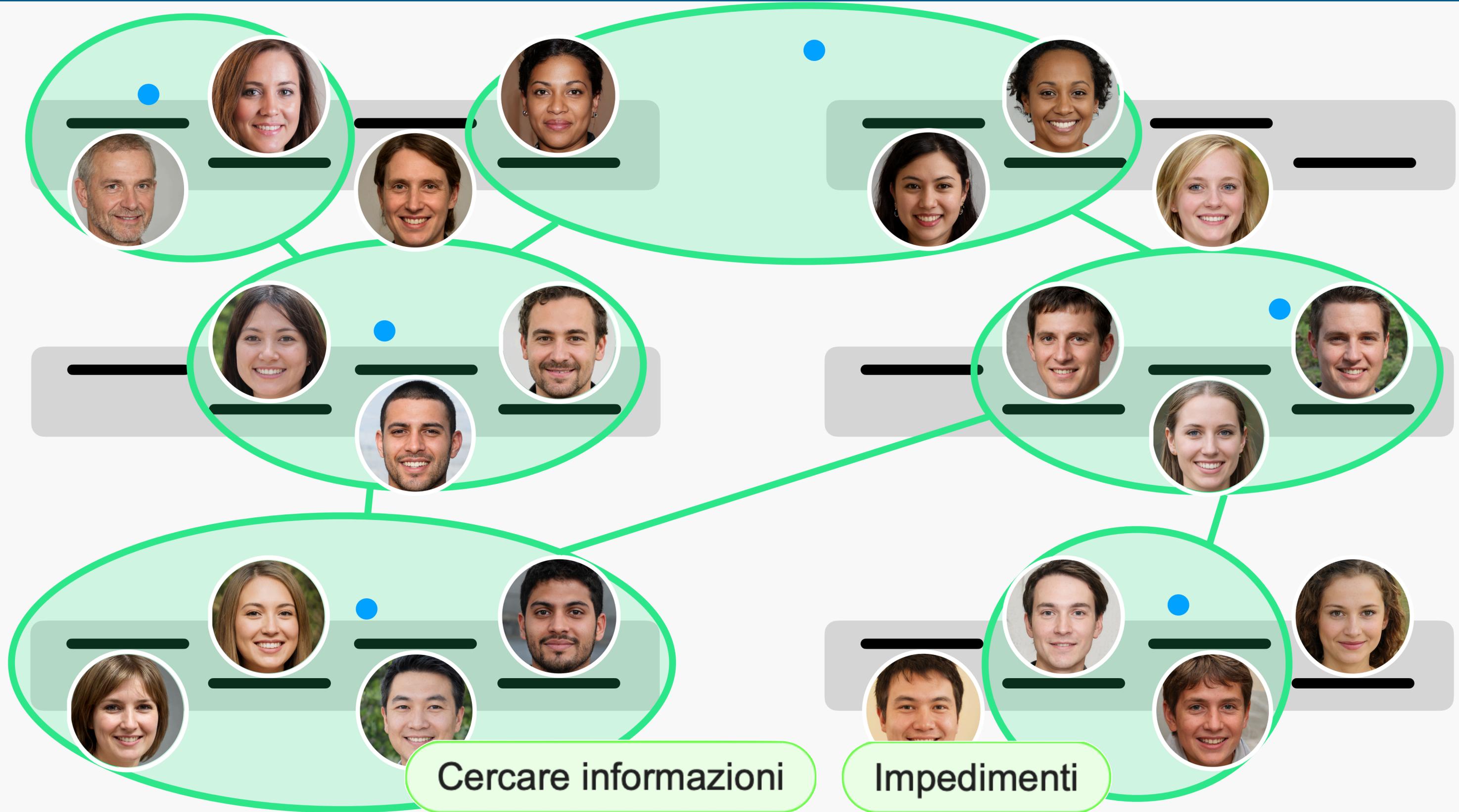
Problem Solving

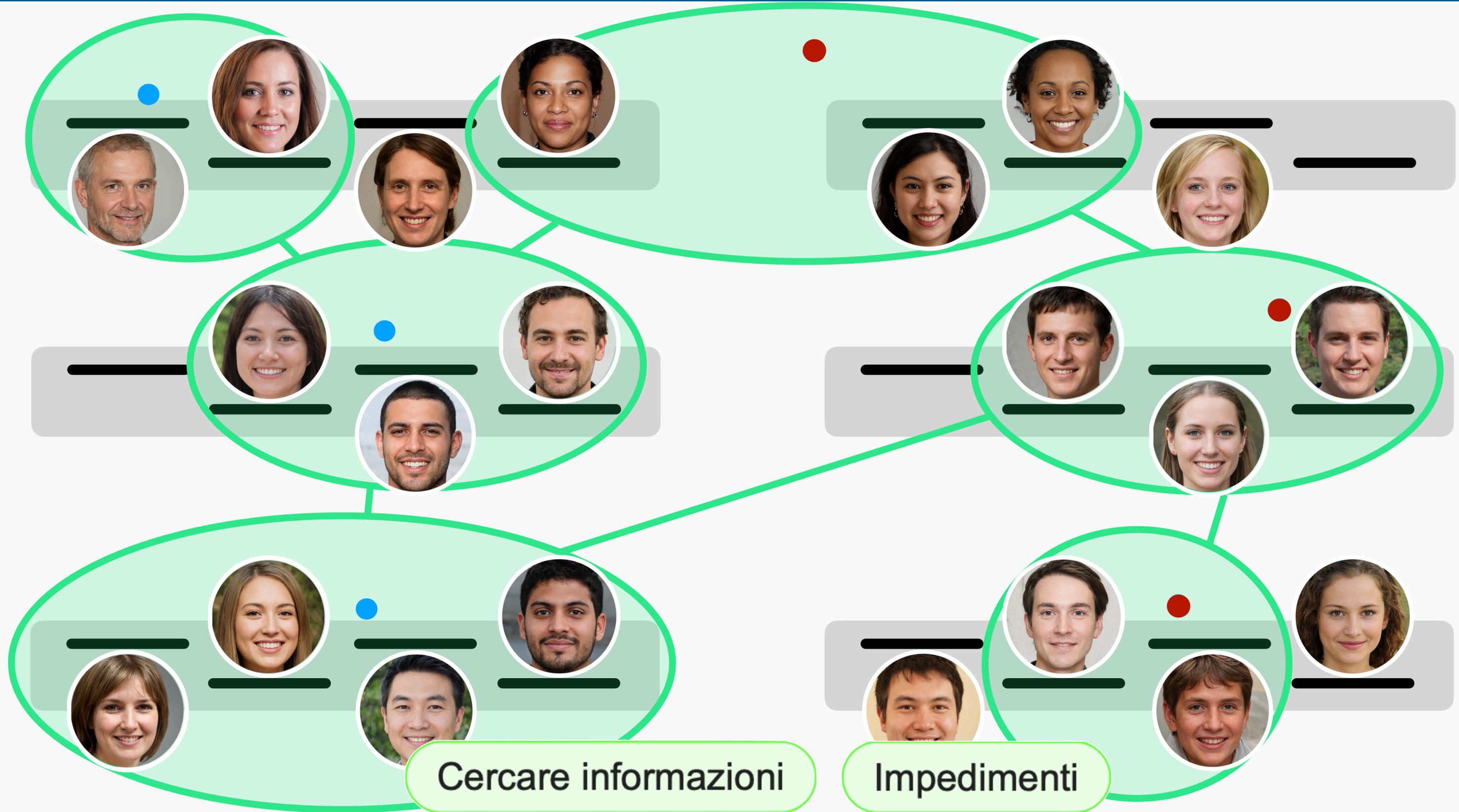
Gratificazione

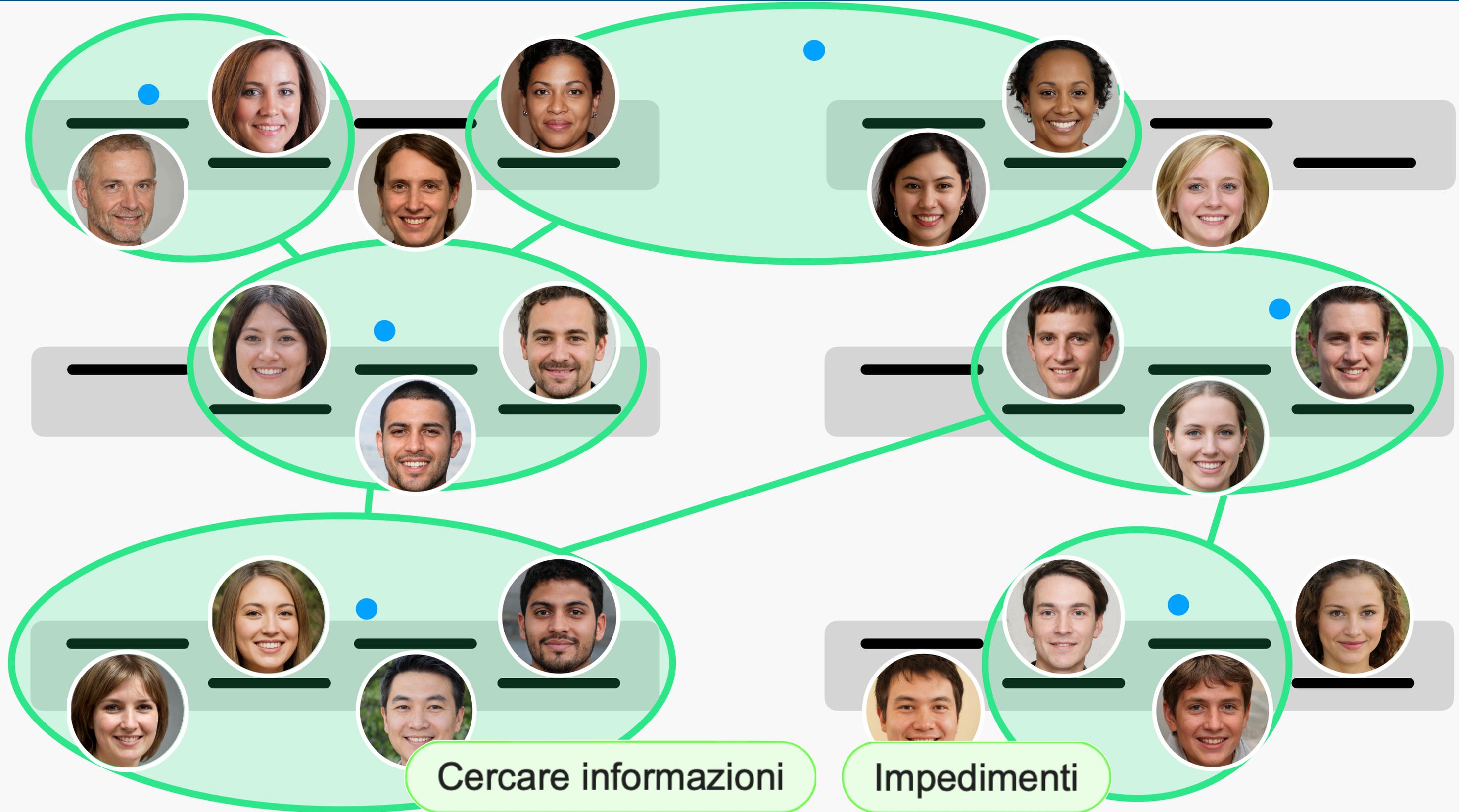
Miglioramento

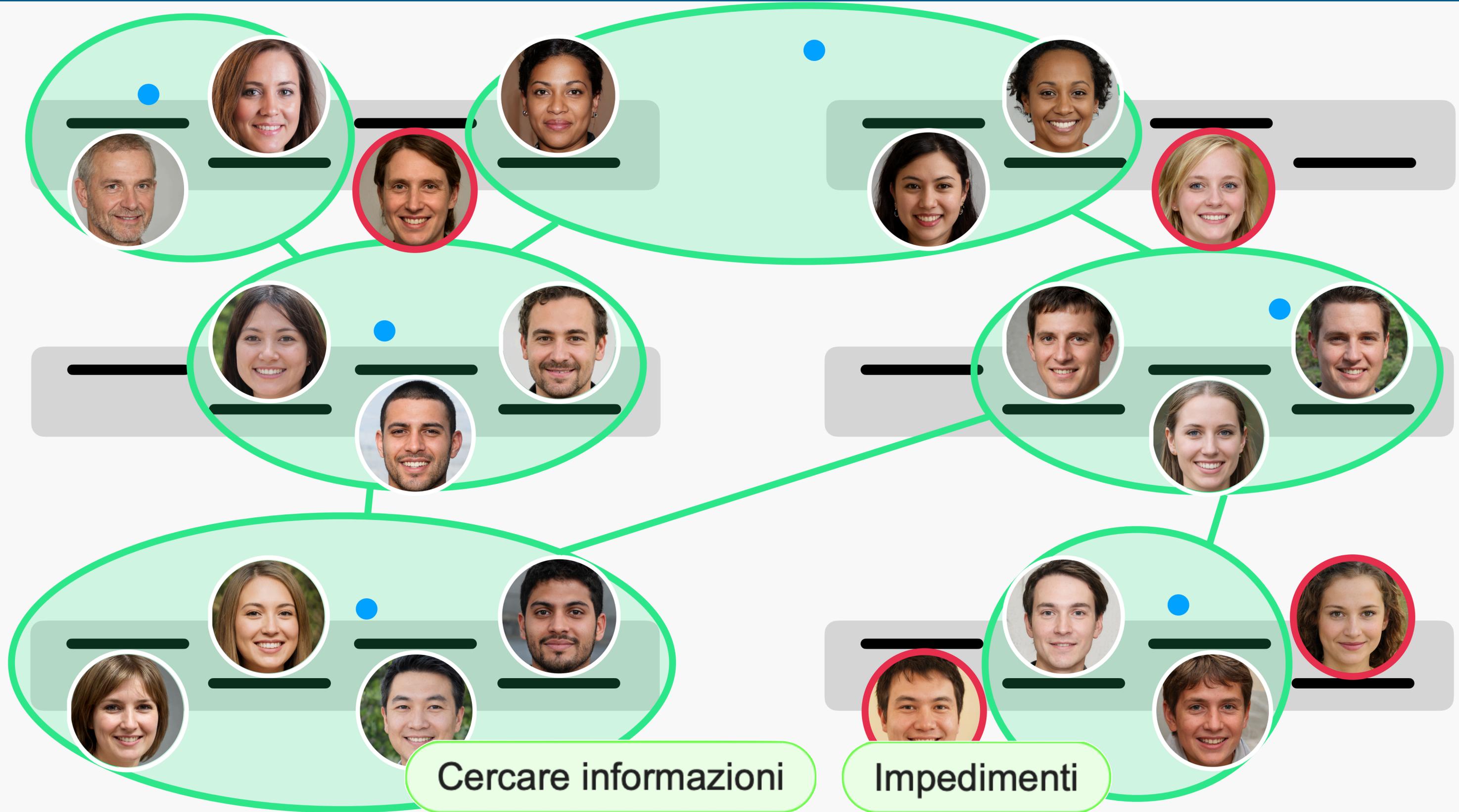




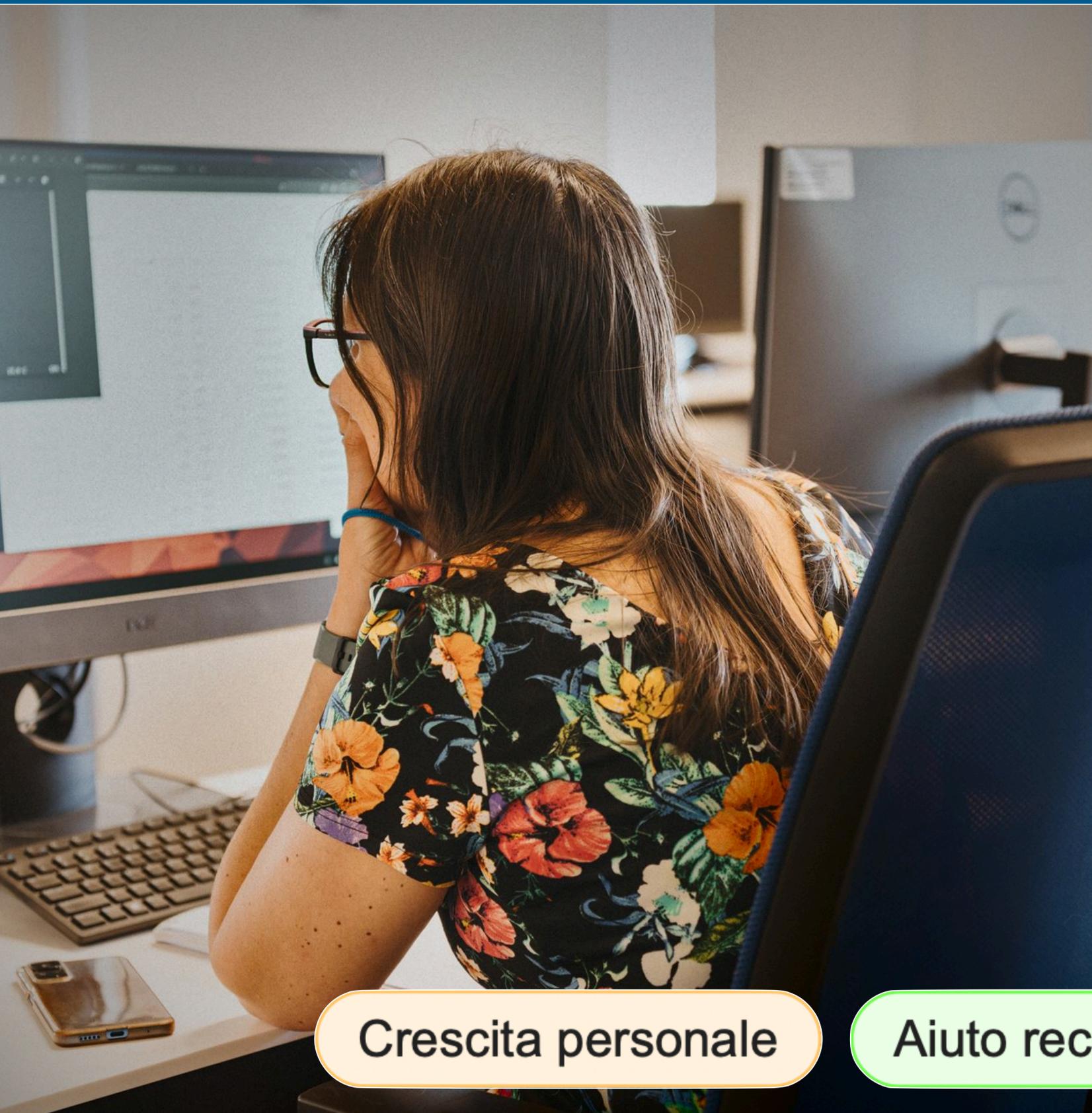








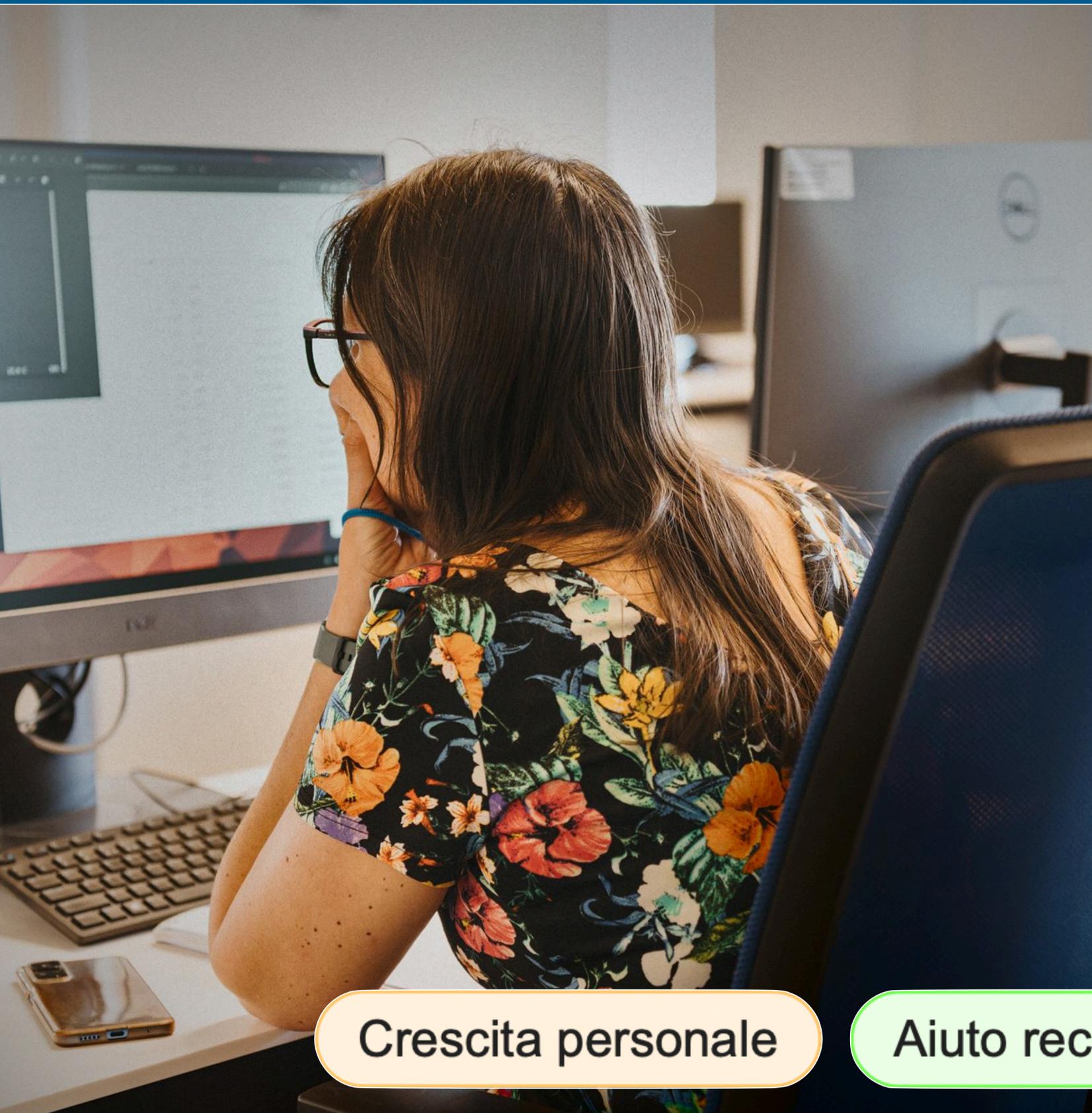




Crescita personale

Aiuto reciproco

Eventi extra-curricolari



Crescita personale

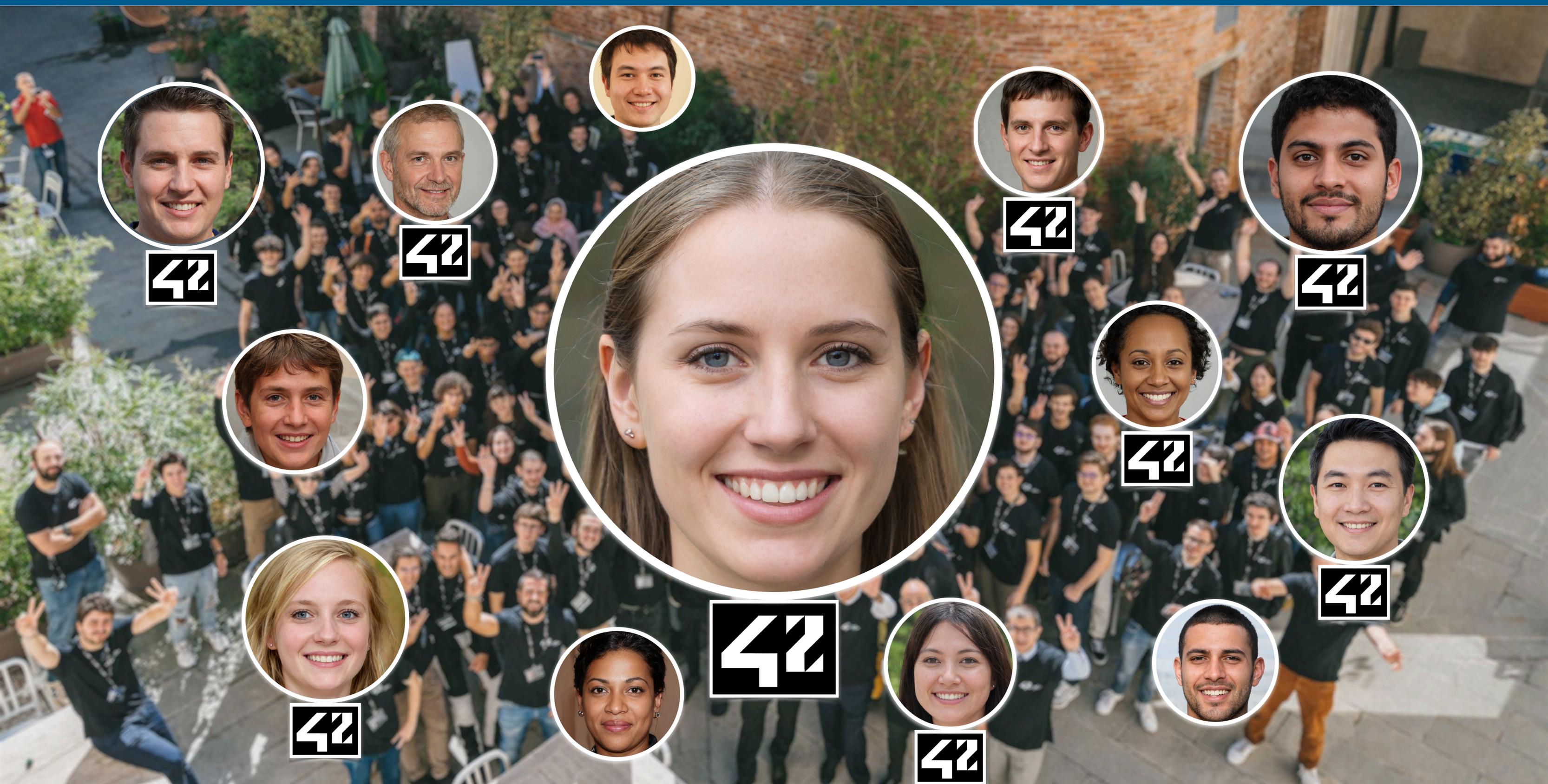
Aiuto reciproco

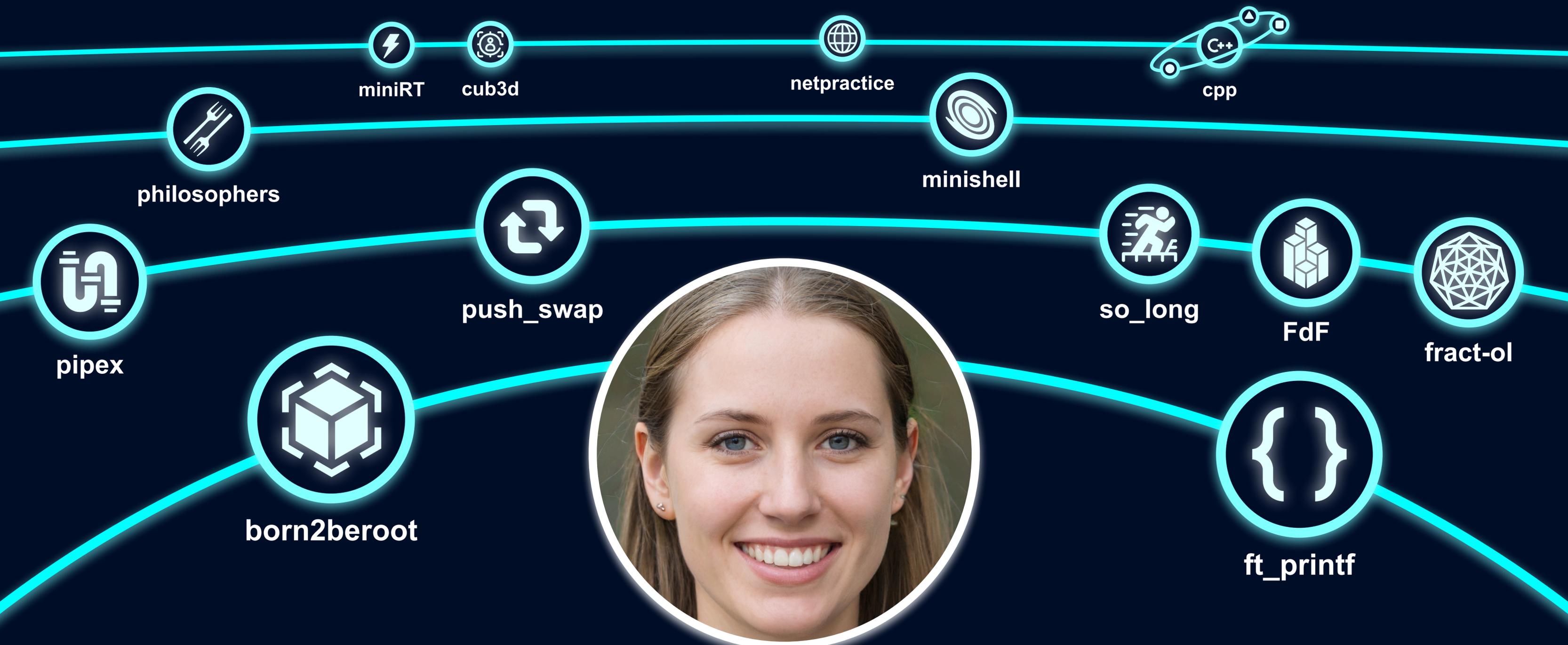


Eventi extra-curricolari



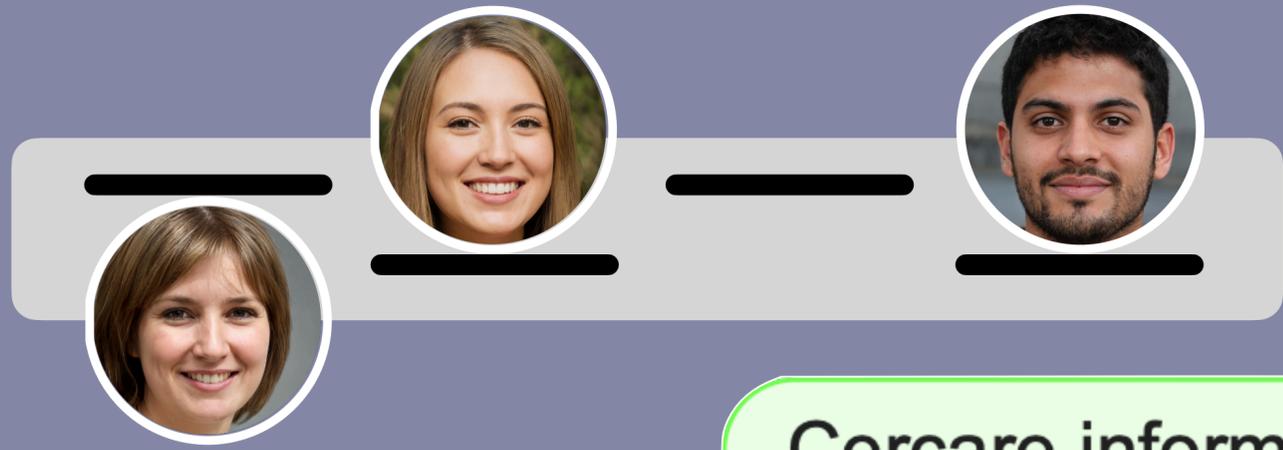
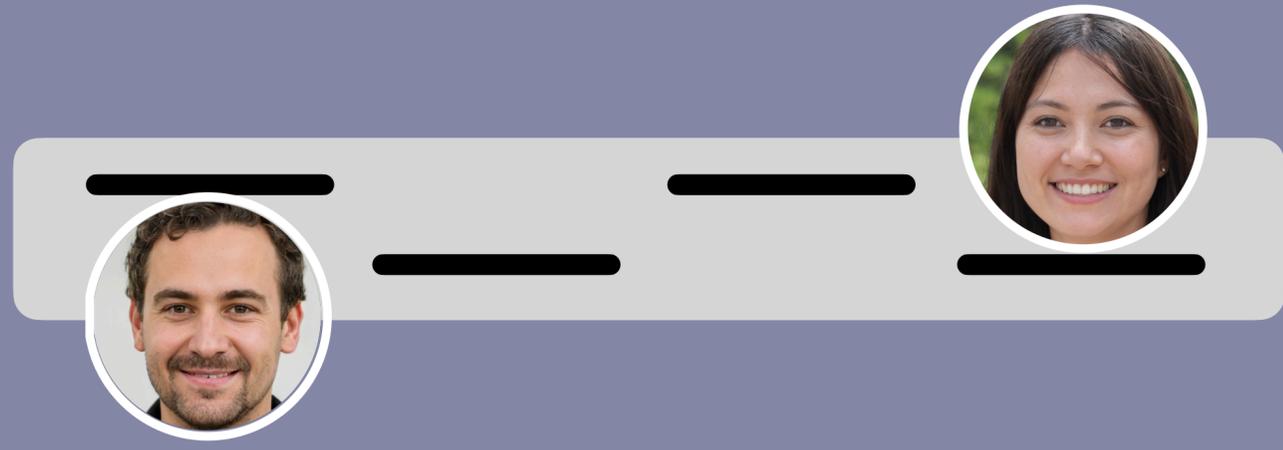






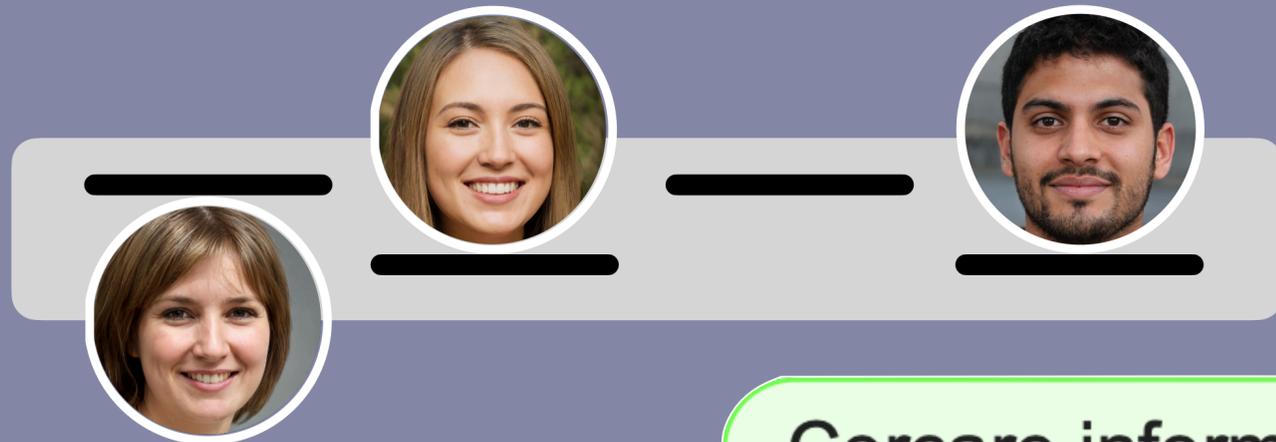
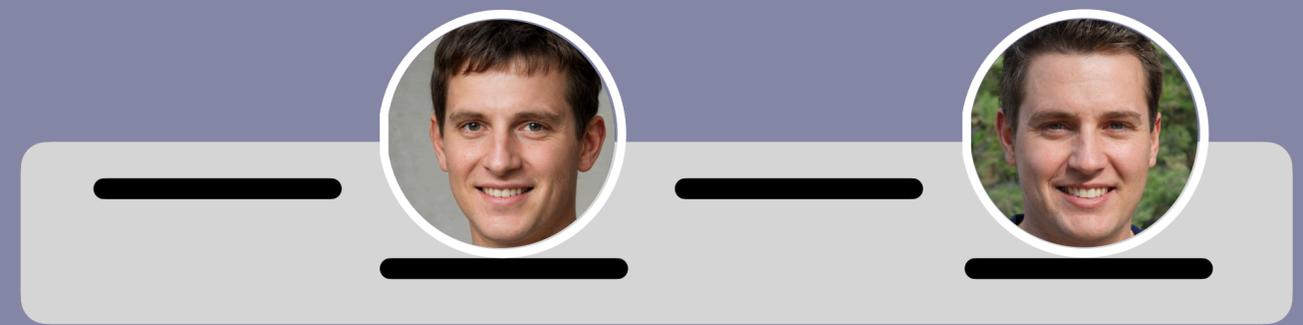
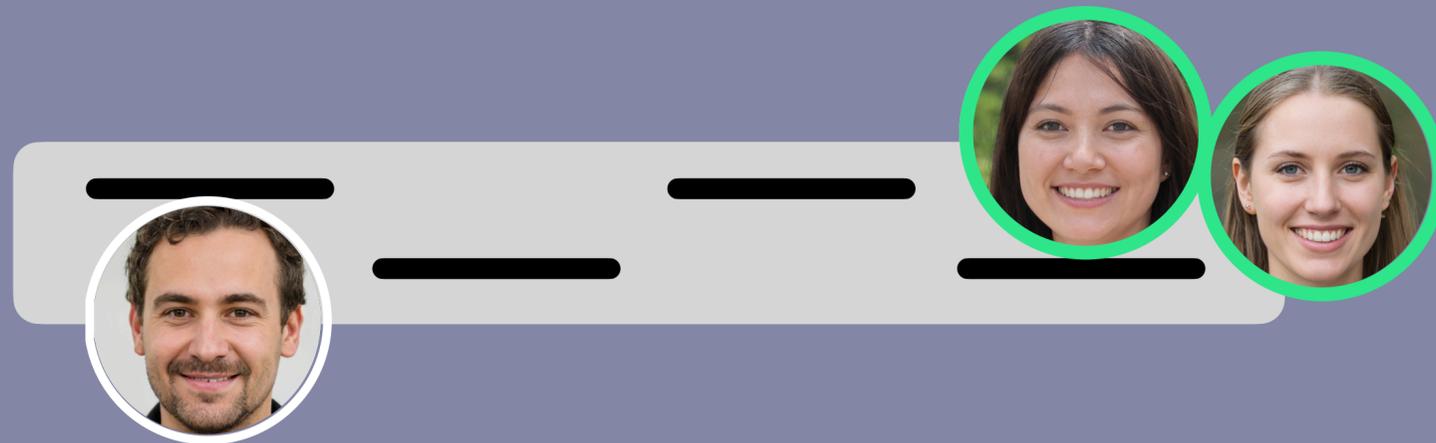
Miglioramento

Approccio allo studio



Cercare informazioni

Aiuto reciproco



Cercare informazioni

Aiuto reciproco



Lavorare insieme

Tattiche

Approccio allo studio



Approccio allo studio

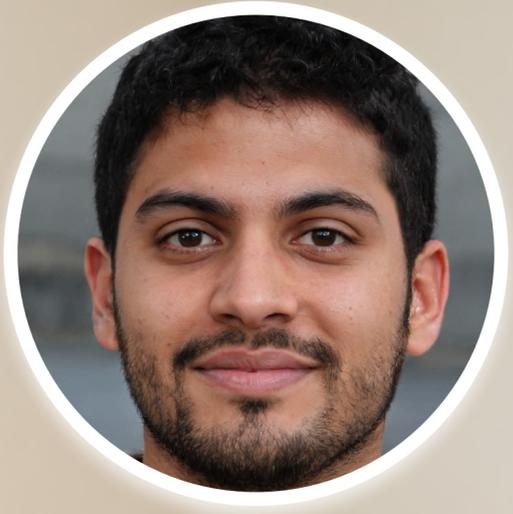


Approccio allo studio



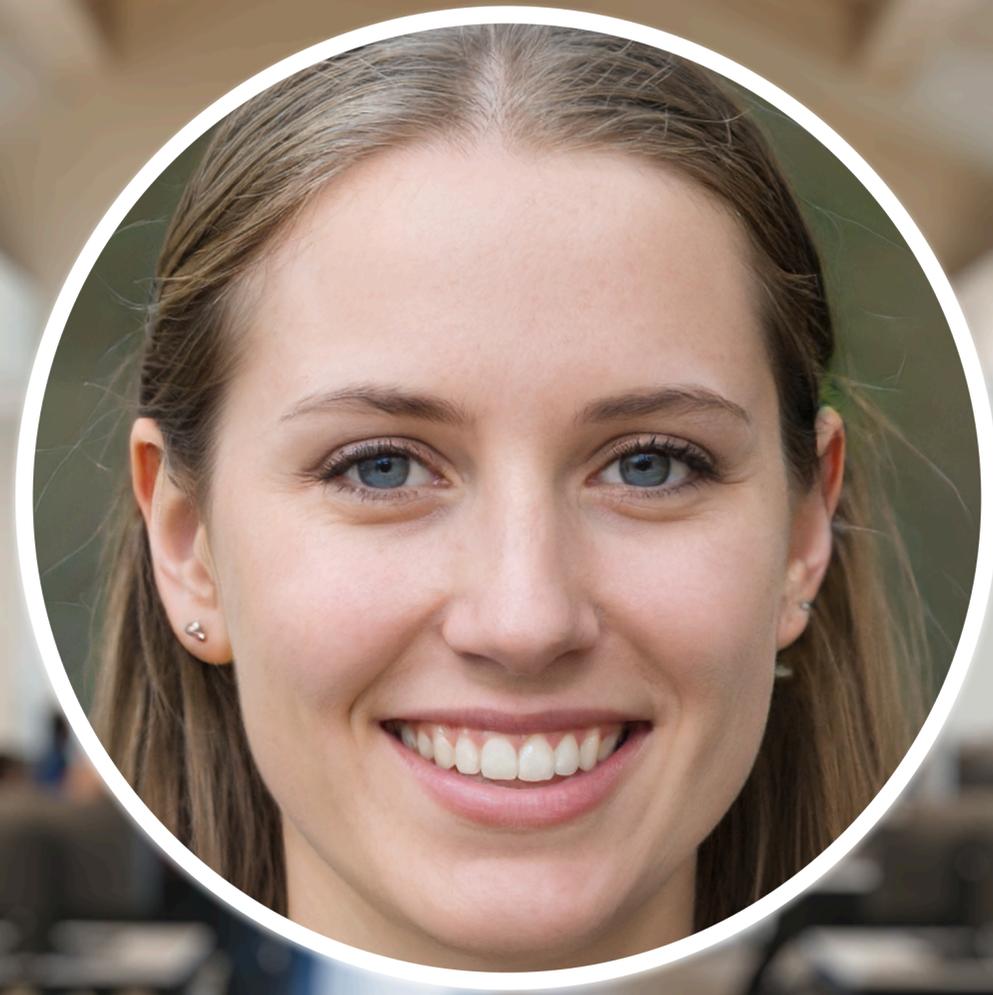
Approfondimento

Rigore



Approfondimento

Rigore



FIRENZE
Luiss by FCRF



42 | FIRENZE
Luiss by FCRF

Potenzialità



Problem-Based Learning

- Punto di partenza per un **apprendimento proattivo**
- Esperienze reali rinforzate con la **pratica**



Gamification

- Supporto per la **motivazione nelle fasi iniziali**
- Erogazione di **feedback frequente e immediato**



Potenzialità



Peer Pedagogy

- Mezzo per l'**acquisizione e la condivisione di informazioni**
- Esami come strumento per la **verifica delle competenze**



Community Development

- Supporto emotivo nei **momenti di difficoltà**
- Occasione di **crescita personale**

Possibili rischi



Problem-Based Learning

- Forte scoraggiamento iniziale



Gamification

- Elemento di distrazione dall'obiettivo



Peer Pedagogy

- Superficialità nel confronto con altri



Community Development

- Abuso dell'aspetto ricreativo

Possibili rischi



Problem-Based Learning

- Forte scoraggiamento iniziale



Gamification

- Elemento di distrazione dall'obiettivo



Peer Pedagogy

- Superficialità nel confronto con altri



Community Development

- Abuso dell'aspetto ricreativo

Responsabilità

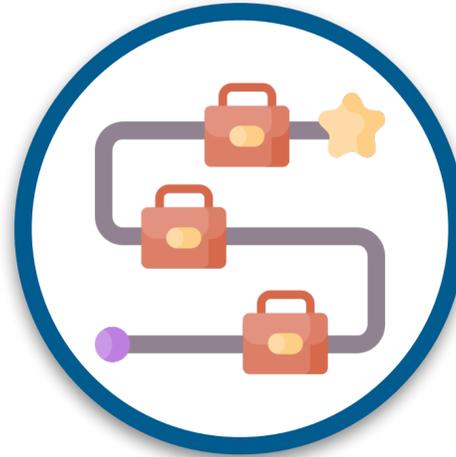
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Metodo innovativo



 **4 componenti**

Percorso impegnativo



 **Motivazione**

Obiettivo



 **Responsabilità**

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