

A modern, open-plan apartment interior. In the foreground, a large, light-colored sectional sofa is positioned on a light wood floor. A round, dark coffee table with a metal frame sits on a patterned rug. In the background, there is a dining area with a round table and chairs, a kitchen with white cabinetry and a wooden countertop, and a staircase with wooden steps and a glass railing. Large windows on the left side offer a view of greenery outside. The overall atmosphere is bright and contemporary.

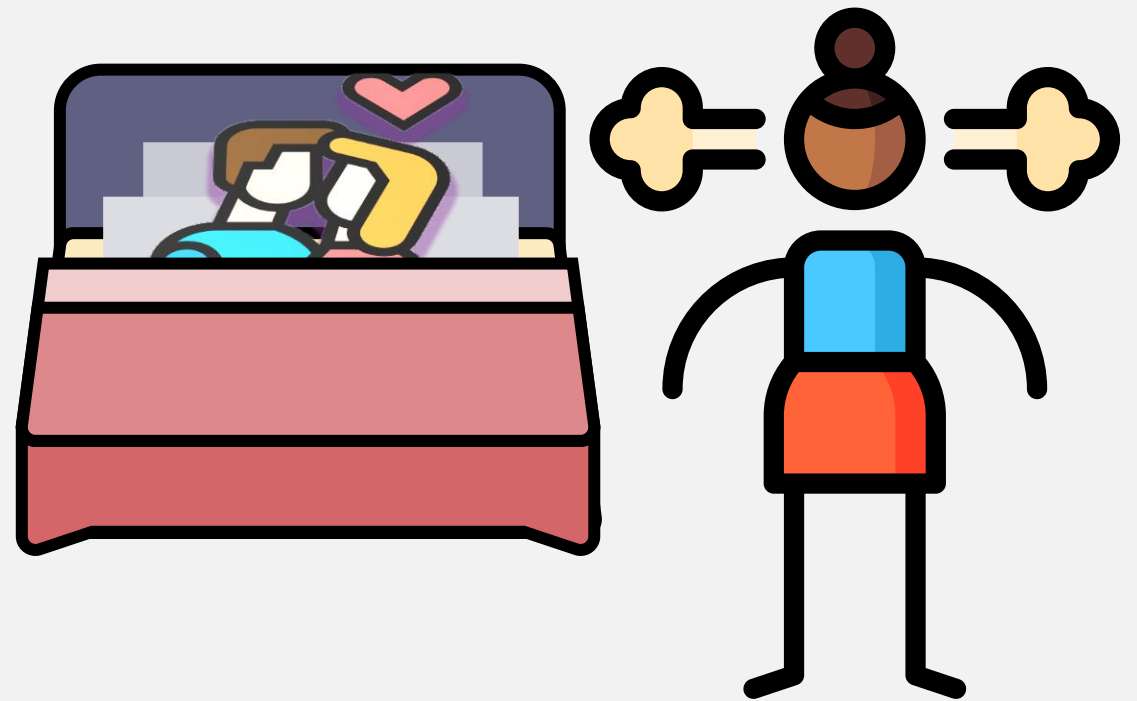
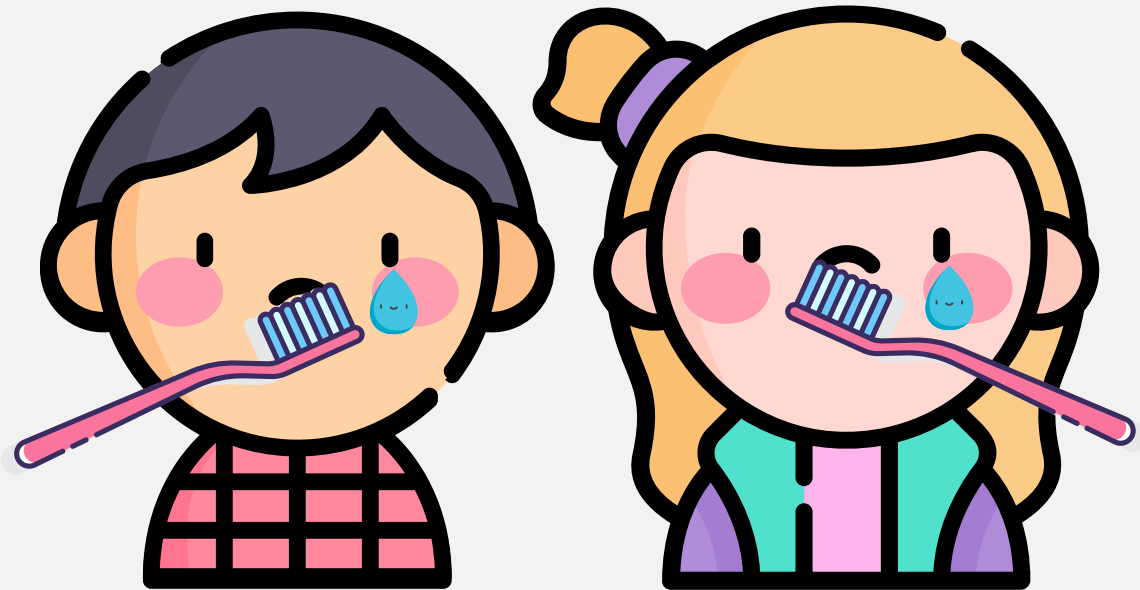
# *My Apartment*

---

A new solution for an easier life

# Imaginons...

---



# Imaginons...

---



Whoa ! Ces développeurs  
sont géniaux !

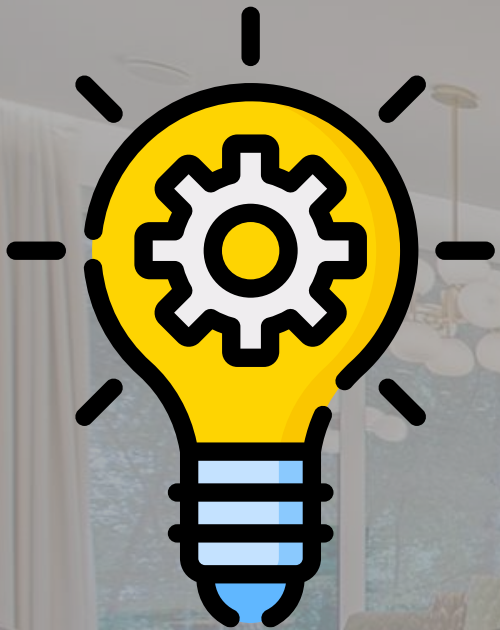


A modern, open-plan apartment interior. In the foreground, a large, light-colored sectional sofa is positioned on a light wood floor. A round, dark coffee table with a metal frame sits on a patterned rug. In the background, there is a dining area with a round table and chairs, a kitchen with white cabinetry and a wooden countertop, and a staircase with wooden steps and a glass railing. Large windows on the left side offer a view of greenery outside. The overall atmosphere is bright and contemporary.

# *My Apartment*

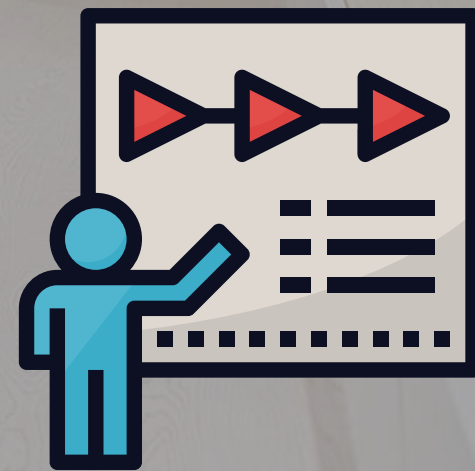
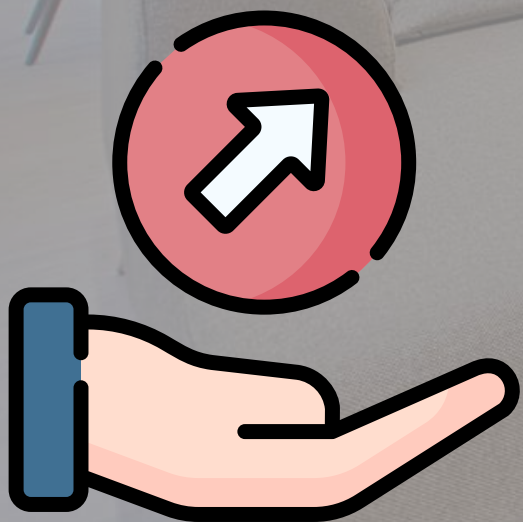
---

A new solution for an easier life

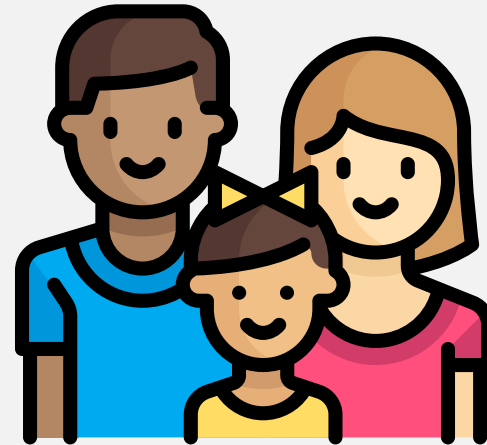
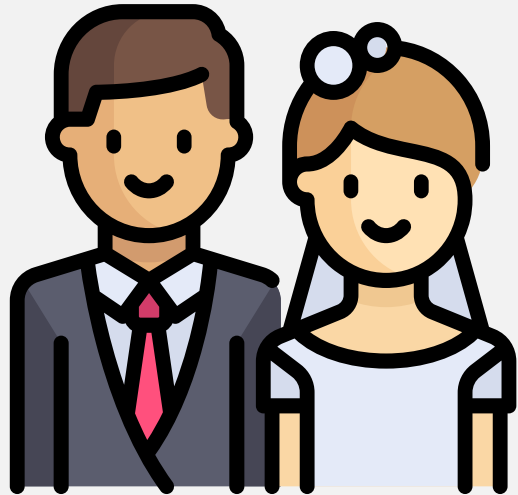
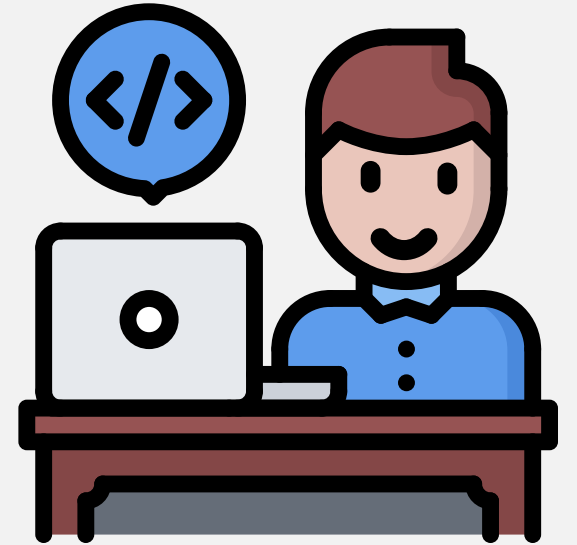
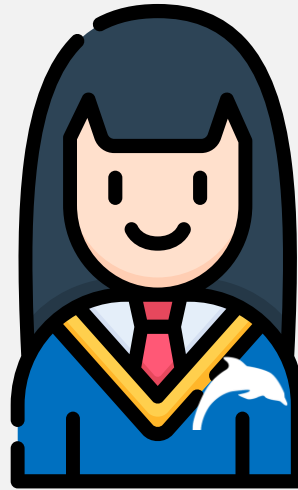


# *My Apartment*

A new solution for an easier life



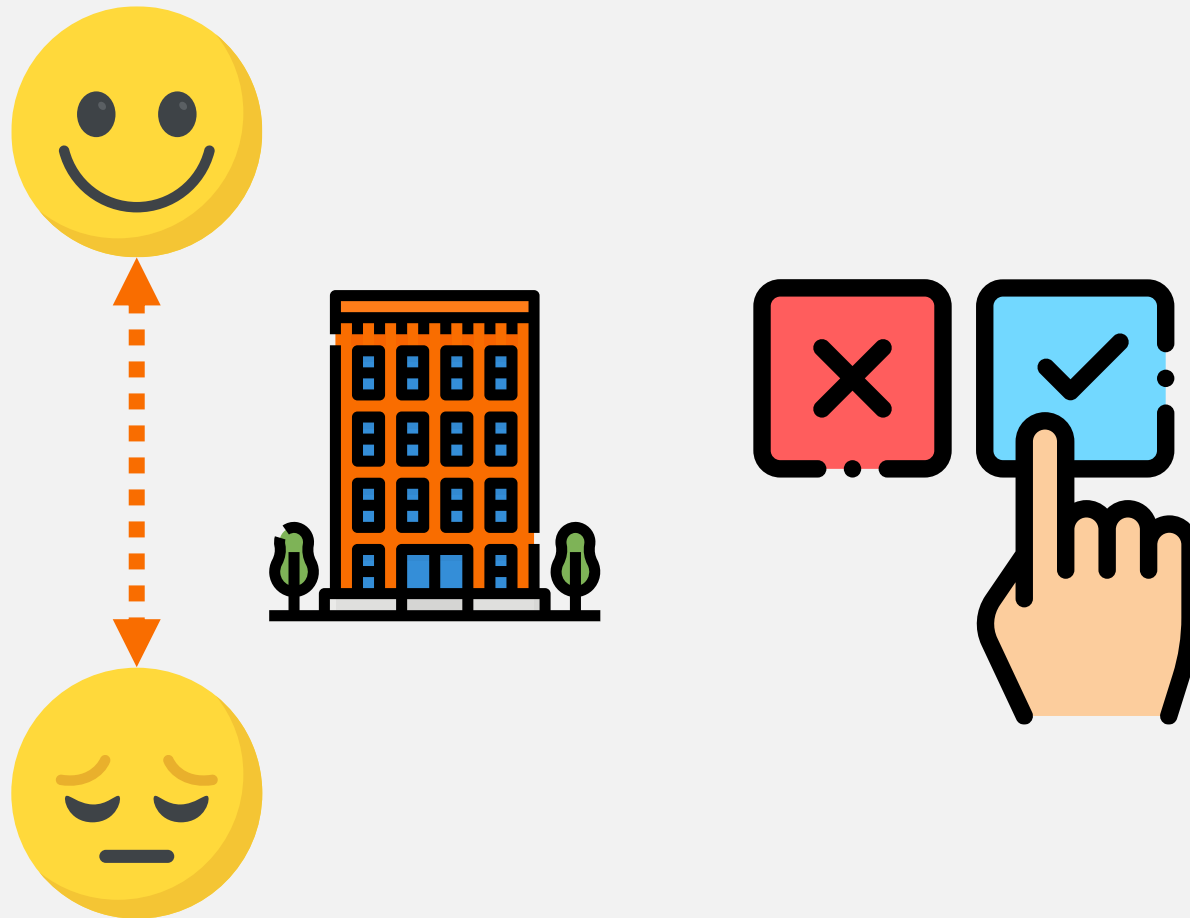
# Le Concept






# Le Concept

---



Profil selection - Questions

 Student profile selected

Would you pay 10€ more for 5m<sup>2</sup> more?  
☐ Yes ☐ No

Would you pay 20€ more for having one more bedroom?  
☐ Yes ☐ No

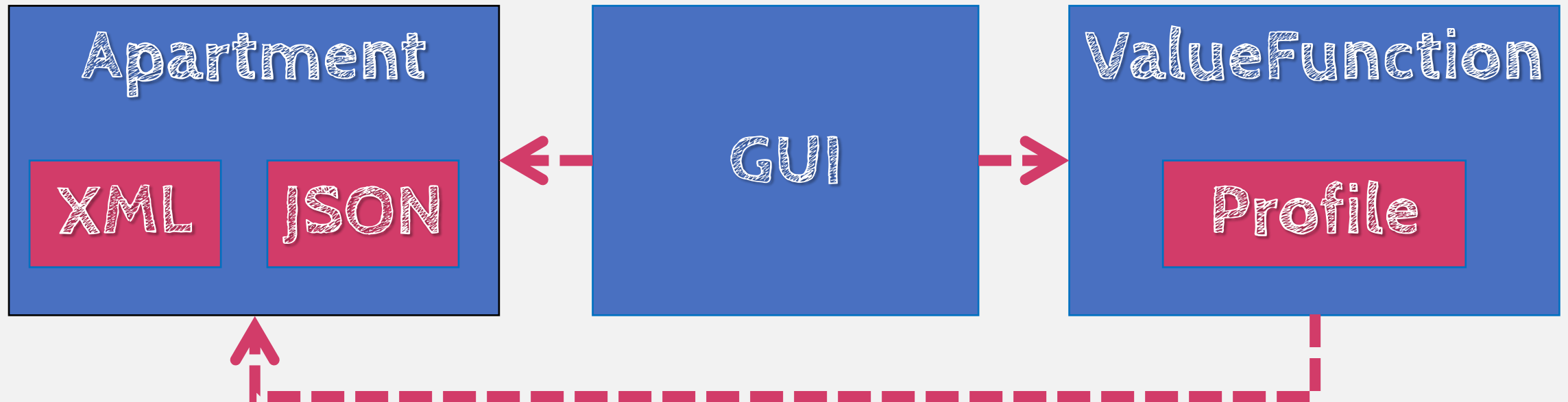
Would you pay 15€ more for having a terrace?  
☐ Yes ☐ No

[Back](#) [Submit](#)

# Architecture du code

---

## Principaux packages





# L'algorithme

---

Évolution



Liste d'appartements intégrée à l'application

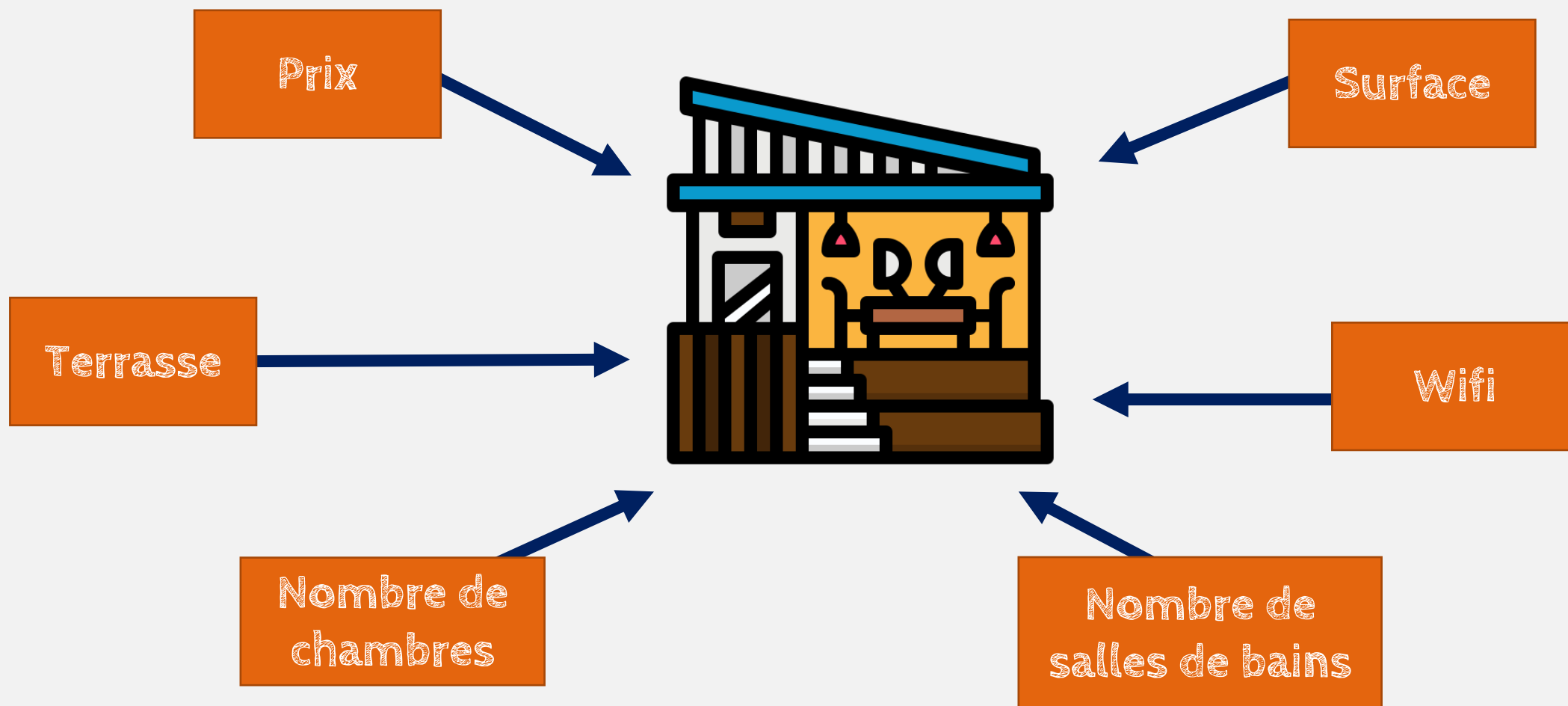


Appartements triés grâce à une fonction de valeur

# L'algorithme

---

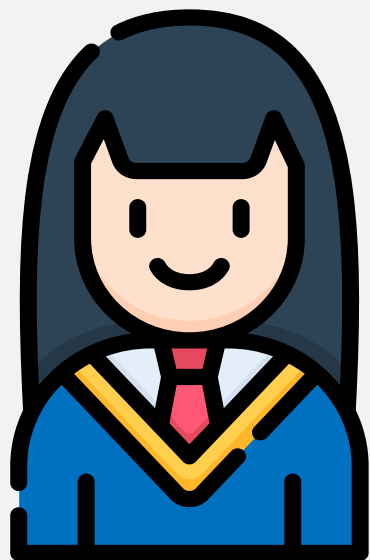
Évolution



# L'algorithme

---

Évolution



Je veux une surface entre  
16 et 60 mètres carré.

Prix



Surface

# L'algorithme

---

Évolution



15 mètres carré

Valeur subjective de 0 car  
 $15 < 16$



65 mètres carré

Valeur subjective de 1 car  
 $65 > 60$

22 mètres carré

Valeur subjective de  
 $22 / (60 - 16) = 0,5$

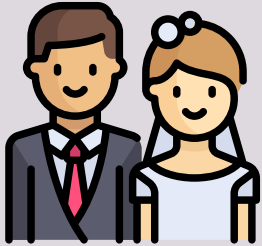


# Les Profils

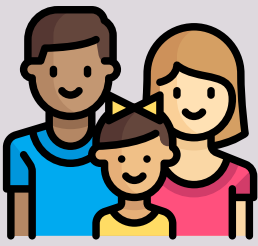
Nouveautés

Profil selection


Select your profile :



Couple




Large family



Student

Next

Profil selection - Questions

 Student profile selected

Would you pay 10€ more for 5m<sup>2</sup> more?

☐ Yes ☐ No

Would you pay 20€ more for having one more bedroom?

☐ Yes ☐ No

Would you pay 15€ more for having a terrace?

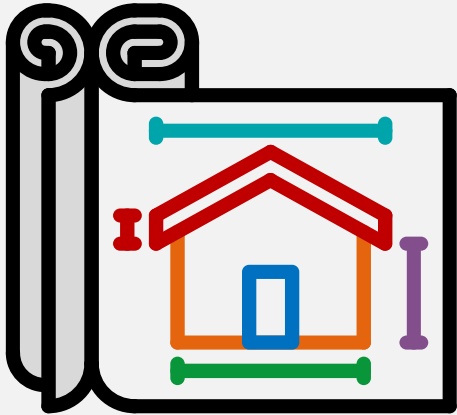
☐ Yes ☐ No

Back Submit

# Import et export d'information

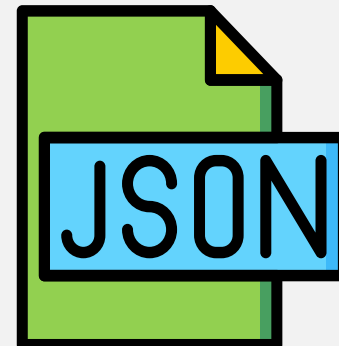
---

Nouveautés



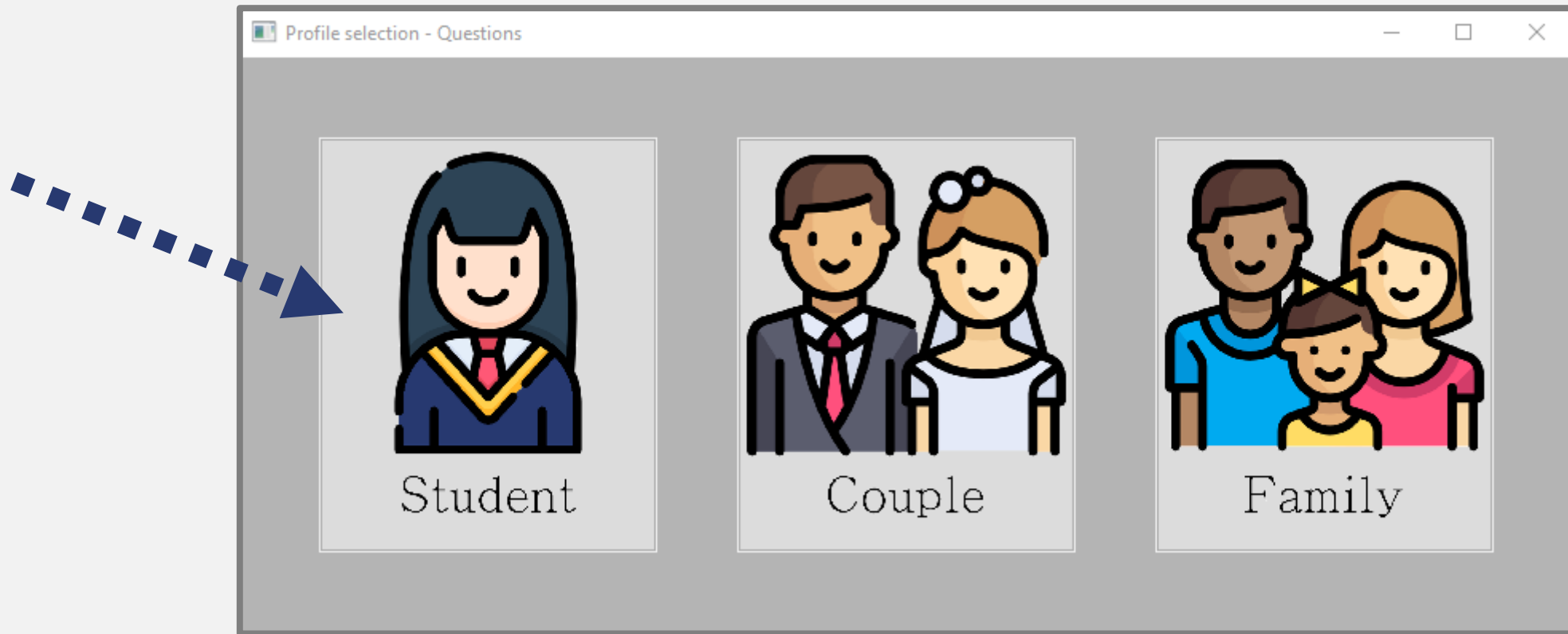
Objet immuable  
Apartment factory  
Génération d'adresse aléatoire

Convertir Apartment en JSON  
Stocker une liste d'Apartment



# Démonstration

---




# Démonstration

---

Profile selection - Questions

Profile selected :

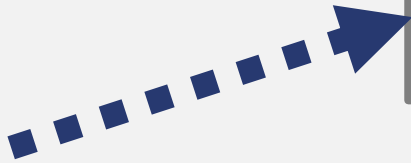
 Student

Would you pay 50€ more for 10 m2 more?

☒ Yes

☐ No

Submit





# Démonstration

Filtered results

Title: Location Appartement 5867 Address : 1 Rue Henri Gateau et Gabriel Lamblin, 93700 Drancy

Title: Location Appartement 7458 Address : 1 Chemin de Dugny, 95500 Gonesse

Title: Location Appartement 4140 Address : 1 Rue Hélène Boucher, 93350 Le Bourget

Title: Location Appartement 3934 Address : 1 Avenue Charles de Gaulle, 95700 Roissy-en-France

Title: Location Appartement 5385 Address : 1 Rue Vincent Van Gogh, 95500 Gonesse

Title: Location Appartement 5008 Address : 1 D 317, 95500 Gonesse

Title: Location Appartement 7879 Address : 1 Rue Marx Dormoy, 93140 Bondy

Title: Location Appartement 9013 Address : 1 Rue Jean Monnet, 95500 Gonesse

Title: Location Appartement 3516 Address : 1 Avenue Massenet, 93700 Drancy

Title: Location Appartement 8419 Address : 1 A 3, 95500 Gonesse

Title: Location Appartement 2921 Address : 1 Rue Michel-Ange, 93600 Aulnay-sous-Bois

Title: Location Appartement 4132 Address : 1 Rue des Frères Lumière, 93150 Le Blanc-Mesnil

Title: Location Appartement 4511 Address : 1 Rue Nungesser et Coli, 95500 Gonesse

Title: Location Appartement 4791 Address : 1 D 84a, 95500 Bonneuil-en-France

Title: Location Appartement 4532 Address : 1 Rue Maurice Bokanowski, 93440 Dugny

Title: Location Appartement 1208 Address : 1 A 3, 95500 Aulnay-sous-Bois

Title: Location Appartement 2256 Address : 1 Rond-Point des Droits de l'Homme, 95500 Gonesse

Title: Location Appartement 6313 Address : 1 Avenue Saint-Fargeau, 93700 Drancy

Title: Location Appartement 8354 Address : 1 D 317, 95500 Gonesse

Title: Location Appartement 7012 Address : 1 Rue Lucien Chapelain, 93140 Bondy

Title: Location Appartement 6084 Address : 1 Rue des Lilas, 93700 Drancy

Title: Location Appartement 693 Address : 1 Rue Guy Môquet, 93150 Le Blanc-Mesnil

Title: Location Appartement 1963 Address : 1 Avenue Pierre Salvi, 95500 Gonesse

Title: Location Appartement 4607 Address : 1 Autoroute du Nord, 95500 Aulnay-sous-Bois

Title: Location Appartement 2324 Address : 1 A 3, 95500 Gonesse

Title: Location Appartement 8567 Address : 1 A 3, 95700 Roissy-en-France

Title: Location Appartement 7528 Address : 1 Chemin de la Couture, 95500 Bonneuil-en-France

List of available apartments :

Details on selected apartment :

Address :

1 Rue Henri Gateau et Gabriel Lamblin  
93700 Drancy

Surface :

78m<sup>2</sup>

Price :

1132€

Number of bedrooms :

2

Number of bathrooms :

2

Wifi :

false

Tv :

true

Terrace :

false



Hide fields

# Un développement agréable

---

Nouveautés

## Github Actions

- ✓  Java CI with Maven / build (ubuntu-latest) (pull\_request) Successful in 29s
- ✓  Java CI with Maven / build (ubuntu-latest) (push) Successful in 27s

# Un développement agréable

Nouveautés

Google Java Format

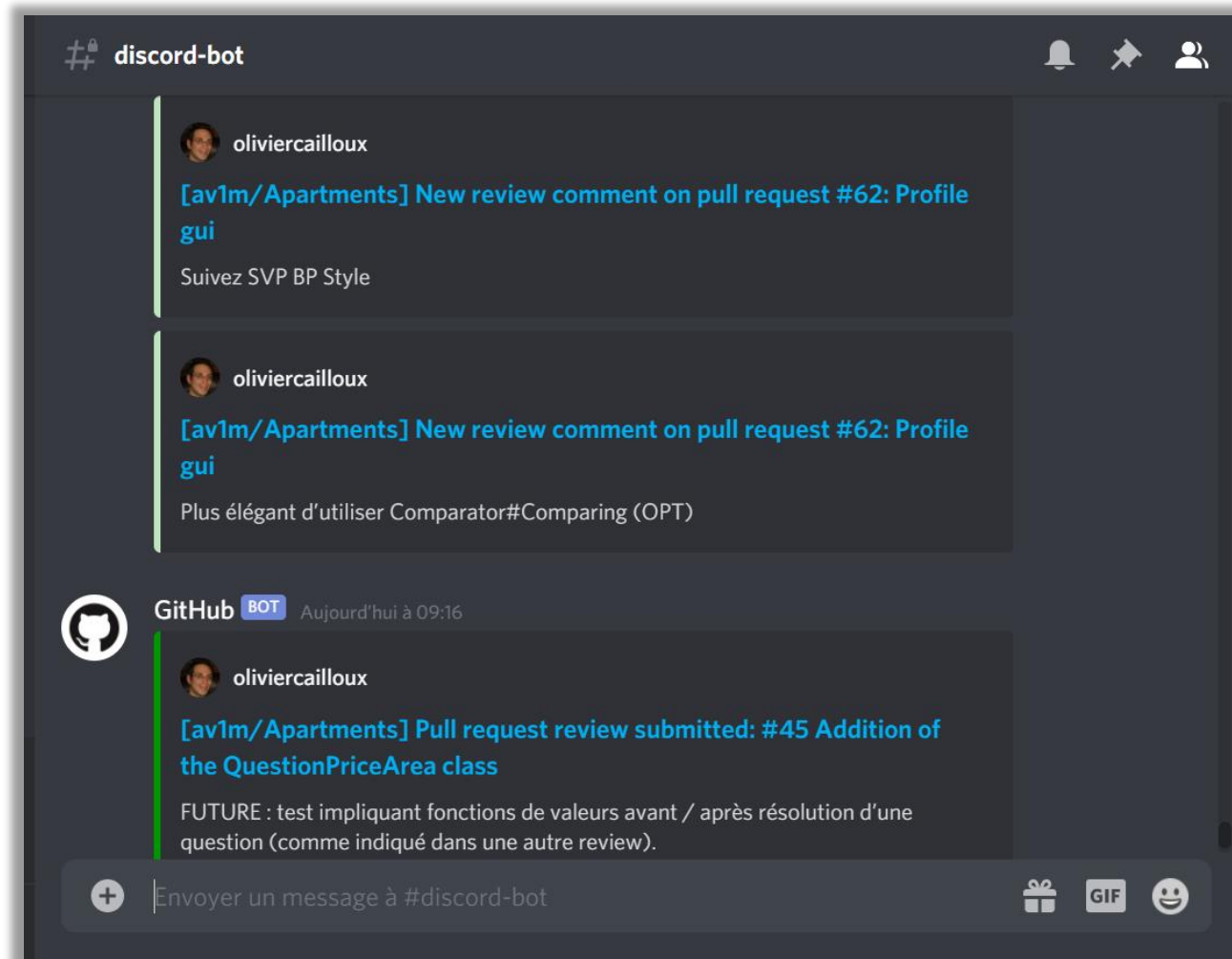
Ne vous limitez  
plus à Eclipse !

```
package io.github.oliviercailloux.y2018.apartments.valuefunction.profile; import static com.google.common.base.Preconditions.checkNotNull; import
this.linearAvf=blavf.build();this.rangesMap=new EnumMap<>(Criterion.class);for(Criterion c:Criterion.values()){this.rangesMap.put(c,Range.closed(
private Profile(EnumMap<Criterion,Range<Double>>rangesMap,LinearAVF linearAvf){this.linearAvf=checkNotNull(linearAvf);checkNotNull(rangesMap);che
public static Profile create(EnumMap<Criterion,Range<Double>>rangesMap,LinearAVF linearAvf){return new Profile(rangesMap,linearAvf);}
public LinearAVF getLinearAVF(){return this.linearAvf;}
public Range<Double>getWeightRange(Criterion crit){checkArgument(this.rangesMap.containsKey(crit));return this.rangesMap.get(crit);}
public ImmutableMap<Criterion,Range<Double>>getWeightsRange(){return Maps.immutableEnumMap(this.rangesMap);}
double getMiddleOfRange(Criterion crit){return(this.getWeightRange(crit).upperEndpoint()+this.getWeightRange(crit).lowerEndpoint())/2;}
public Profile withLinearAVF(LinearAVF newLinearAvf){Arrays.stream(Criterion.values()).forEach(c->this.checkWeightInRange(c,newLinearAvf));return
public void checkWeightInRange(Criterion crit,LinearAVF linearAvf){Range<Double>range=this.getWeightRange(crit);Double weight=linearAvf.getWeight
public void checkWeightInRanges(Criterion crit,LinearAVF linearAvf){Range<Double>range=this.getWeightRange(crit);Double weight=linearAvf.getWeight
private void setWeightRange(Criterion crit,Range<Double>value){checkArgument(this.rangesMap.containsKey(crit));checkRangeValidity(value);this.ran
private void setWeightRanges(Criterion crit,Range<Double>value){checkArgument(this.rangesMap.containsKey(crit));checkRangeValidity(value);this.ra
private void checkRangeValidity(Range<Double>value){checkNotNull(value,"The rage cannot be null");checkArgument(value.hasLowerBound())&&value.hasU
public static class Builder{private Profile toBuild;public Builder(){toBuild=new Profile();}
public Profile build(){checkNotNull(toBuild.linearAvf);for(Criterion c:Criterion.values()){checkNotNull(toBuild.getWeightRange(c),c.name()+" is n
return toBuild;}
public Builder setLinearAVF(LinearAVF newLinearAvf){this.toBuild.linearAvf=newLinearAvf;return this;}
public Builder setWeightRange(Criterion crit,double lowerValue,double upperValue){this.toBuild.setWeightRange(crit,Range.closed(lowerValue,upperV
public Builder setWeightRange(Criterion crit,Range<Double>value){this.toBuild.setWeightRange(crit,value);return this;}
public static class Builders{private Profile toBuild;public Builders(){toBuild=new Profile();}
public Profile build(){checkNotNull(toBuild.linearAvf);for(Criterion c:Criterion.values()){checkNotNull(toBuild.getWeightRange(c),c.name()+" is n
return toBuild;}
public Builders setLinearAVF(LinearAVF newLinearAvf){this.toBuild.linearAvf=newLinearAvf;return this;}
public Builders setWeightRange(Criterion crit,double lowerValue,double upperValue){this.toBuild.setWeightRange(crit,Range.closed(lowerValue,upper
public Builders setWeightRange(Criterion crit,Range<Double>value){this.toBuild.setWeightRange(crit,value);return this;}}}
```

# Un développement agréable

Nouveautés

Bot Discord



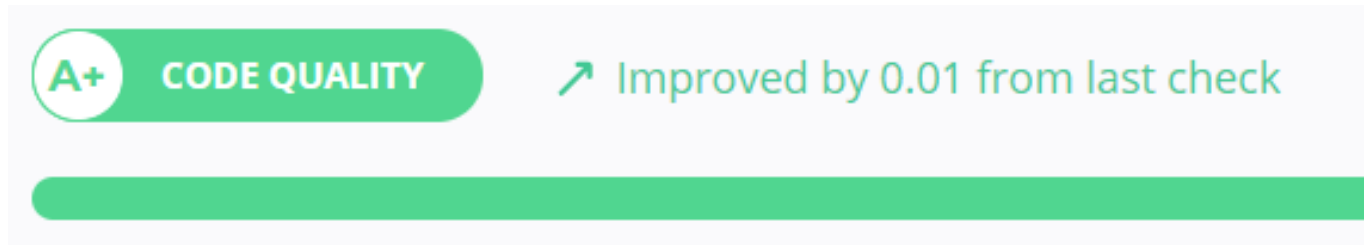


# Un développement agréable

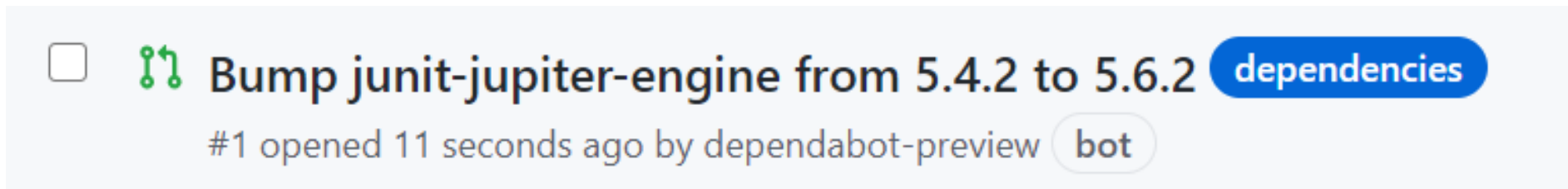
---

Nouveautés

- Code Factor



- Dependabot



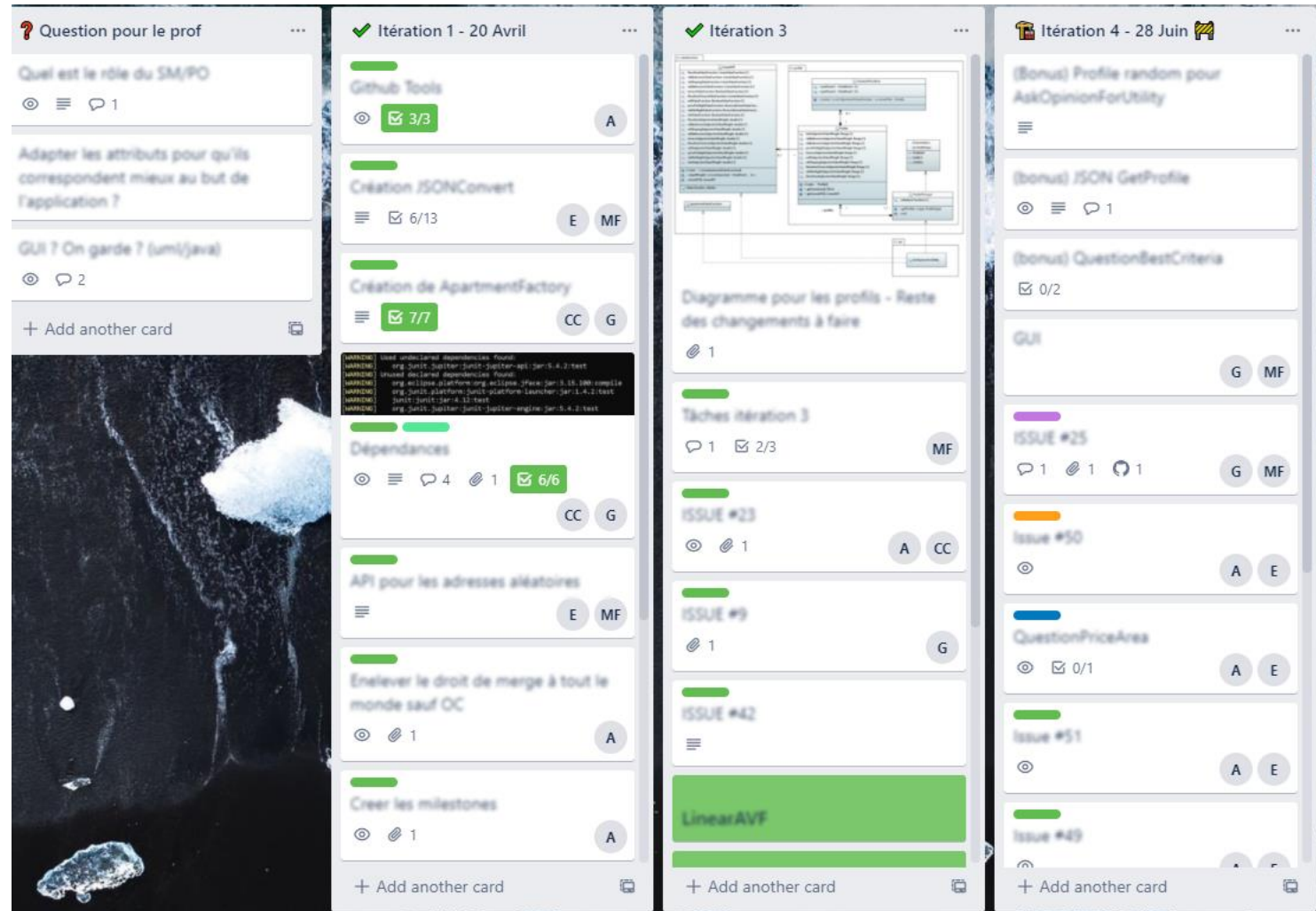
- Code Inspector



# Un développement agréable

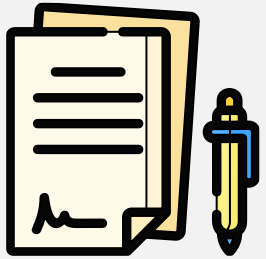
Nouveautés

Trello



# Challenges

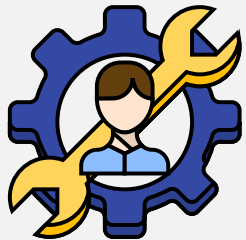
---



Garder une documentation complète et à jour



Designer et implémenter entièrement des fonctionnalités



Faciliter le développement et augmenter la qualité

# Difficultés

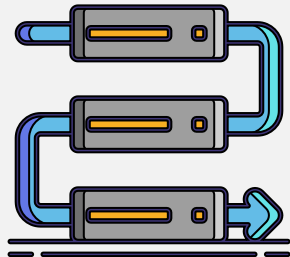
---



Compréhension de l'algorithme



Prise en compte de l'existant

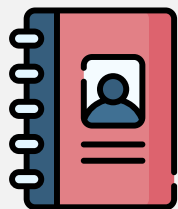


Gestion des dépendances entre binômes

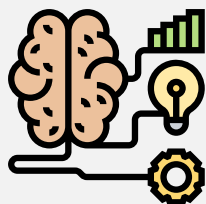


# Evolutions futures de l'application

---



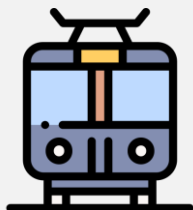
Créer de nouveaux profils



Ajout d'apprentissage par renforcement



Implémenter de nouvelles questions



Calculer la distance jusqu'au métro

# Fun Facts

---

 519 Commits

 36 Pull requests fusionnées

 0 Pull request refusée

 20 Issues traitées

# Fun Facts

---





+10 351 messages échangés



+73 mails échangés avec M. Cailloux



Pas d'heures pour travailler

 +16000  
 -8000

Lignes modifiées en une semaine

A modern, open-plan apartment interior. In the foreground, a large, light-colored sectional sofa is positioned on a light-colored floor. Behind it, a round coffee table with a dark top and metal legs sits on a patterned rug. In the background, there is a dining area with a round table and chairs, a kitchen with white cabinetry and a wooden countertop, and a staircase with wooden steps and a glass railing. Large windows on the left side offer a view of greenery outside. The overall atmosphere is bright and contemporary.

# *My Apartment*

A new solution for an easier life

Gabriel GUISSSET — Avi MIMOUN — Clémence COUSIN — Morgane FIOT — Etienne CARTIER

# Sources

---

- Illustrations : <https://www.flaticon.com/authors/freepik>, <https://www.gif-maniac.com>, <https://tenor.com/>, <https://github.com/>, <https://www.behance.net/> (Onur Mermer)
- Image fond de la présentation : <https://pixabay.com/fr/users/7769808-7769808/>
- Image Github : <https://github.com/av1m/Apartments/pulls>
- Image Discord : <https://discord.com/channels/>
- Statistiques Github : <https://github.com/av1m/Apartments/pulse>
- **DOCUMENTATION DU PROJET** : <https://github.com/av1m/Apartments/blob/master/README.adoc>