Matching Questions + Algorithm Draft A

Each page details a question asked in the matching process.

A compatibiilty score is calculated by comparing question responses from each host andf guest.

The contributions to compatibilty scores are described on each pages 'matching process' section.

Questions may be skipped by both the host and guest.

Certain responses will exclude host and match pairs as described in 'matching process'.

DRAFT

Question Summary & Weightings

Question	Weighting
Smoking	2
Alcohol	2
Postcode	-
Allergies	-
Health	-
Worldview	2
Personal space	2
Privacy	2
Time at home	1
Evening meals	1
Social activities	1

GUEST QUESTION

Do you smoke?

Yes · No

HOST QUESTION

Do you smoke?

Yes · No

MATCHING PROCESS

Next page...

GUEST QUESTION

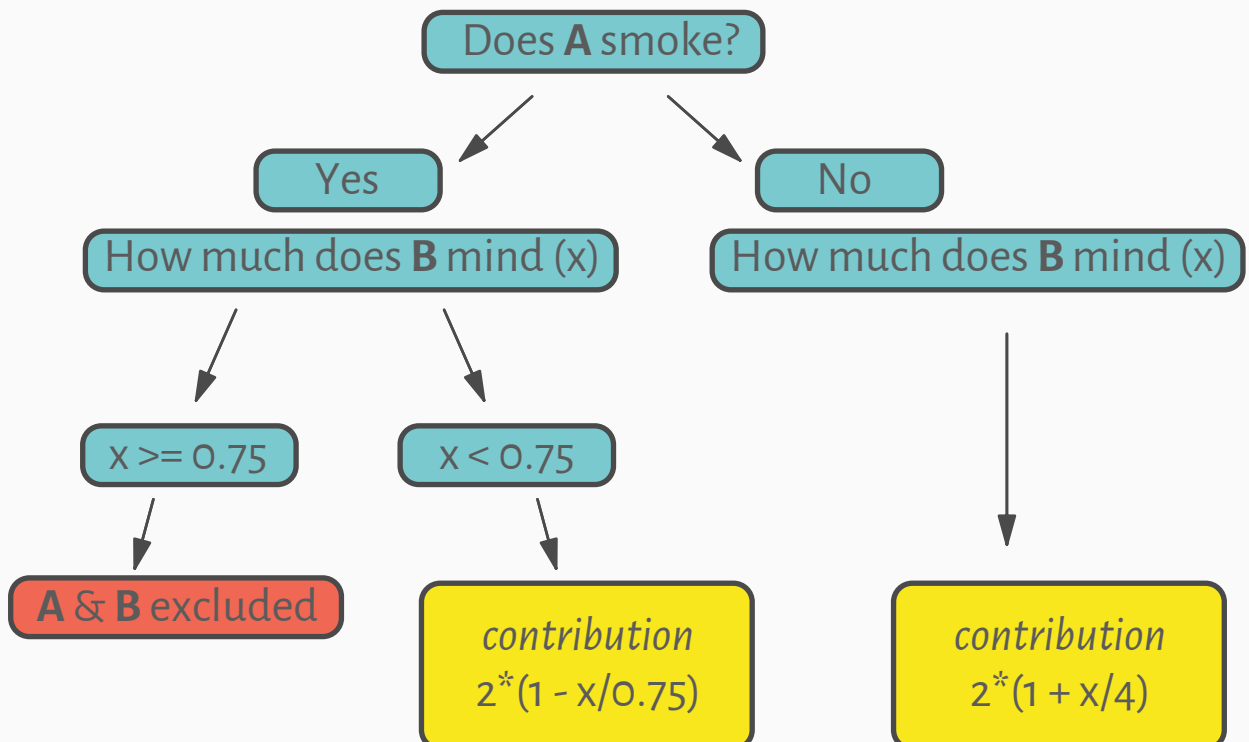How much do you mind if your host smokes .

Scale (0-1)

HOST QUESTION

How much do you mind if your guest smokes .

Scale (0-1)

MATCHING PROCESS

Does **A** smoke?

Yes → How much does **B** mind (x)

No → How much does **B** mind (x)

x >= 0.75

x < 0.75

A & **B** excluded

contribution
2*(1 - x/0.75)

contribution
2*(1 + x/4)

GUEST QUESTION

Do you drink alcohol often?

Scale (0-1)

HOST QUESTION

Do you drink alcohol often?

Scale (0-1)

MATCHING PROCESS

Next page...

GUEST QUESTION

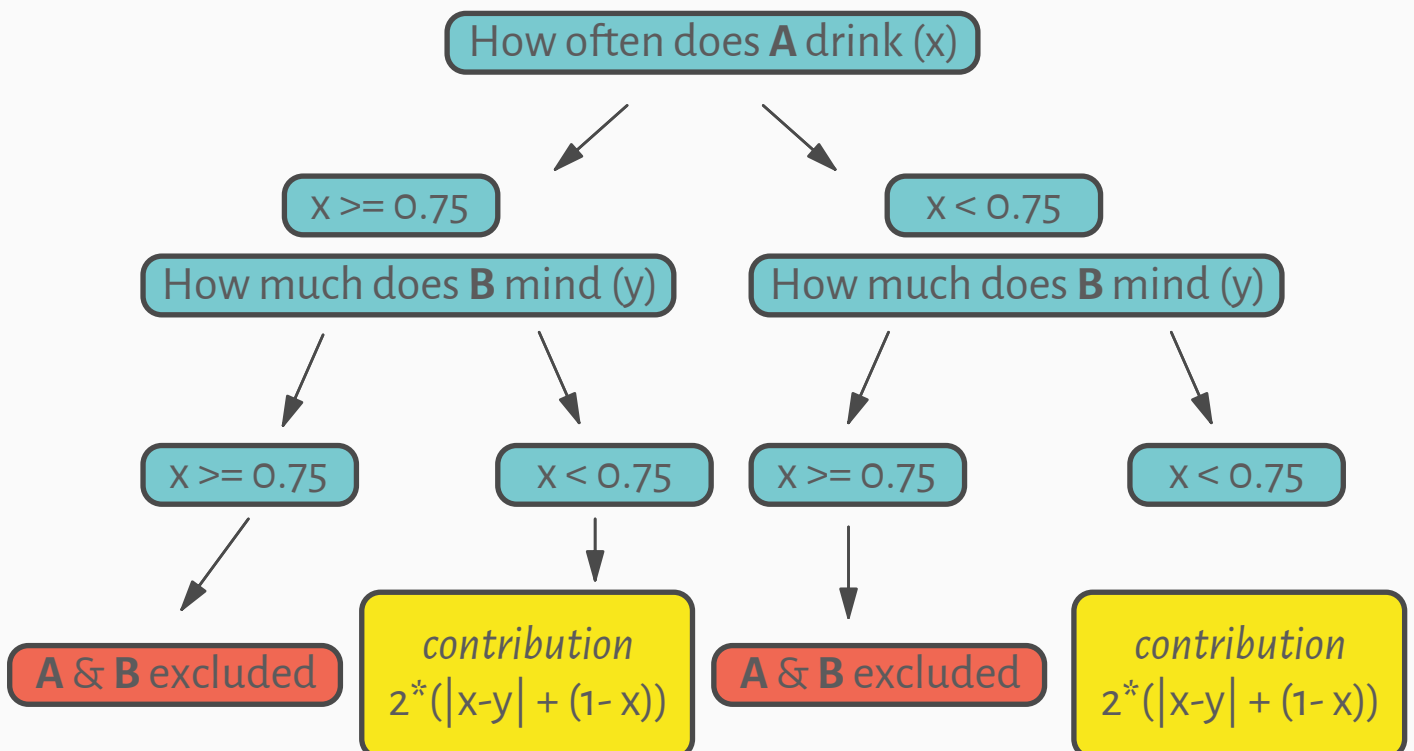How much do you mind if your host drinks alcohol .

Scale 0-1

HOST QUESTION

How much do you mind if your host drinks alcohol.

Scale 0-1

MATCHING PROCESS

How often does **A** drink (x)

x >= 0.75

x < 0.75

How much does **B** mind (y)

How much does **B** mind (y)

x >= 0.75

x < 0.75

x >= 0.75

x < 0.75

A & **B** excluded

contribution
$2*(|x-y| + (1-x))$

A & **B** excluded

contribution
$2*(|x-y| + (1-x))$

GUEST QUESTION

What postcode would you like to live near to?

Predictive Postcode/Any location option

HOST QUESTION

What postcode do you live nearto?

Predictive Postcode

MATCHING PROCESS

Google maps API combined with longitude & latitude distance calculation function (PHP) to discern distance between hosts and potential guests.

If > 100km: EXCLUDE.

GUEST QUESTION

Question re allergies (Pets for instance)

—

HOST QUESTION

Question re allergies (Pets for instance)

—

MATCHING PROCESS

—

GUEST QUESTION

Do you have any physical health concerns?

Yes · No

HOST QUESTION

Do you have any physical health concerns?

Yes · No

MATCHING PROCESS

See after health section

GUEST QUESTION

How do your physical health concerns impact your everyday life?

Scale 0-1 (0: no impact, 1: full impact)

HOST QUESTION

How do your physical health concerns impact your everyday life?

Scale 0-1 (0: no impact, 1: full impact)

MATCHING PROCESS

Asked only if answered yes to previous question

See after health section

GUEST QUESTION

Do you have any mental health concerns?

Yes · No

HOST QUESTION

Do you have any mental health concerns?

Yes · No

MATCHING PROCESS

See after health section

GUEST QUESTION

How do your mental health concerns impact your everyday life?

Scale 0-1 (0: no impact, 1: full impact)

HOST QUESTION

How do your mental health concerns impact your everyday life?

Scale 0-1 (0: no impact, 1: full impact)

MATCHING PROCESS

Asked only if answered yes to previous question

See after health section

GUEST QUESTION

What scale of community support do you have for your health?

Scale 0-1 (0: no support, 1: good support)

HOST QUESTION

What scale of community support do you have for your health?

Scale 0-1 (0: no support, 1: good support)

MATCHING PROCESS

Asked only if answered yes to either
or both of the health questions.

See after health section

GUEST QUESTION

Are you prepare to live with a host who has a health condition?

Yes · No

HOST QUESTION

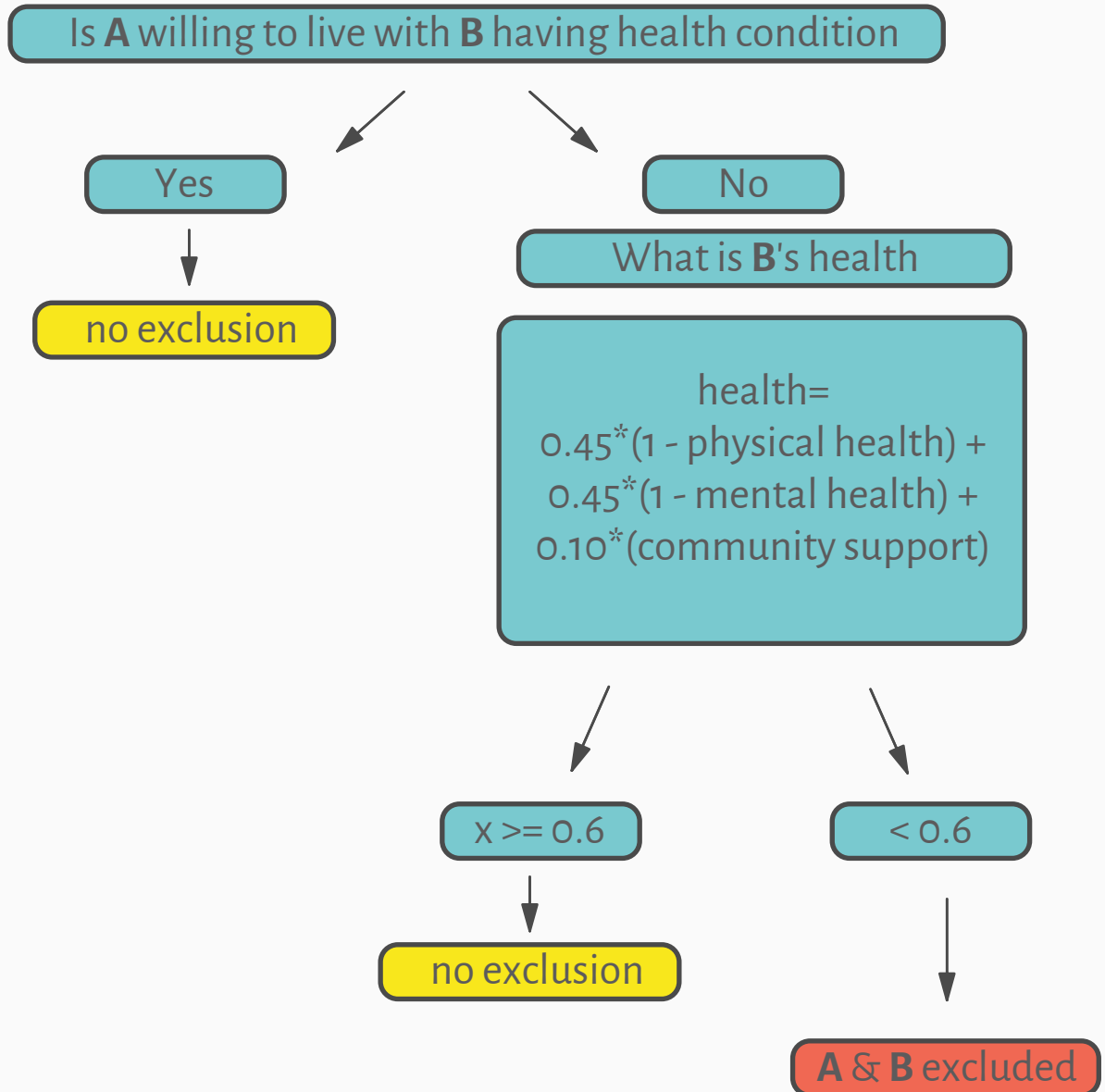Are you prepare to live with a guest who has a health condition?

Yes · No

MATCHING PROCESS

Next page...

MATCHING PROCESS

Health Section

Is **A** willing to live with **B** having health condition

Yes → No

Yes → no exclusion

No → What is **B**'s health

health=
0.45*(1 - physical health) +
0.45*(1 - mental health) +
0.10*(community support)

x >= 0.6 → no exclusion

< 0.6 → **A** & **B** excluded

GUEST QUESTION

How important is it to you to be matched with someone holding a similar worldview?

Scale 0-1 (0: not important, 1: important)

HOST QUESTION

How important is it to you to be matched with someone holding a similar worldview?

Scale 0-1 (0: not important, 1: important)

MATCHING PROCESS

Next page...

GUEST QUESTION

What worldview do you most identify with?
(you may select more than one)

Agnostic · Bahai · Buddhist · Athiest · Catholic · Christian · Hindu · Muslim (shia) · Muslim (sunni) · Sikh · Other

HOST QUESTION

What worldview do you most identify with?
(you may select more than one)

Agnostic · Bahai · Buddhist · Athiest · Catholic · Christian · Hindu · Muslim (shia) · Muslim (sunni) · Sikh · Other

MATCHING PROCESS

Do **A** & **B** share any worldviews?

Yes

No

How important is worldview to **A** (x)

How important is worldview to **B** (y)

no contribution

contribution
$2^*(x + y)$

GUEST QUESTION

How much do you value your personal space?

Scale 0-1 (0: not at all, 1: very much so)

HOST QUESTION

How much do you value your personal space?

Scale 0-1 (0: not at all, 1: very much so)

MATCHING PROCESS

How much does **A** value personal space (x)

How much does **B** value personal space (y)

contribution
$2*(1 - |x-y|)$

GUEST QUESTION

How much do you value your privacy?

Scale **0-1 (0: not at all, 1: very much so)**

HOST QUESTION

How much do you value your privacy?

Scale **0-1 (0: not at all, 1: very much so)**

MATCHING PROCESS

How much does **A** value privacy (x)

How much does **B** value privacy (y)

contribution
$2^{*}(1 - |x-y|)$

GUEST QUESTION

How much time do you spend at home?

Scale 0-1 (0: not much, 1: all my time)

HOST QUESTION

How much time do you spend at home?

Scale 0-1 (0: not much, 1: all my time)

MATCHING PROCESS

How much is **A** home (x)

How much is **B** home (y)

contribution
$1*(1 - |x-y|)$

GUEST QUESTION

How often would you like to share evening meals with the host?

Scale **0-1 (0: never, 1: every night)**

HOST QUESTION

How often would you like to share evening meals with the guest?

Scale **0-1 (0: never, 1: every night)**

MATCHING PROCESS

How often does **A** want to share evening meals (x)

How often does **B** want to share evening meals (y)

contribution
$1*(1 - |x-y|)$

GUEST QUESTION

How often would you get like to
get engaged in social household activities?

Scale 0-1 (0: never, 1: every day)

HOST QUESTION

How often would you get like to
get engaged in social household activities?

Scale 0-1 (0: never, 1: every day)

MATCHING PROCESS

How often does **A** want to get involved in activities (x)

How often does **B** want to get involved in activities (y)

contribution
$1*(1 - |x-y|)$

GUEST QUESTION

Which of the below best describes your family situation?

Offer options with various numbers of adults/children and relationships between each person (to do)

HOST QUESTION

What type of guests would you prefer to host?

Offer options with various numbers of adults/children and relationships between each person (to do)

MATCHING PROCESS

To be created.

GUEST QUESTION

What type of hosts would you prefer to live with?

Offer options with various numbers of adults/children and relationships between each person (to do)

HOST QUESTION

Which of the below best describes your family situation?

Offer options with various numbers of adults/children and relationships between each person (to do)

MATCHING PROCESS

To be created.