# Bumble Case Study

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# About Bumble

Bumble is an online dating application. Profiles of potential matches are displayed to users, who can "swipe left" to reject a candidate or "swipe right" to indicate interest. In heterosexual matches, only female users can make the first contact with matched male users, while in same-sex matches either person can send a message first.

## Mission

Bumble is a platform and community that creates empowering connections in love, life, and work. We promote accountability, equality, and kindness in an effort to end misogyny and re-write archaic gender roles. On Bumble, women always make the first move.

## Vision

Bumble envisions a world free of misogyny, where all relationships are equal.

# Problem Statement

You've joined as an APM at Bumble. Your senior product manager shows you a data that says 'Date to Match' Ratio is just 1/15. She asks you to brainstorm ways to Increase this ratio.

**Goal: Increase Bumble's 'Date-to-Match Ratio' in India.**
**Date = Physical Date**
**Match = Once 2 people swipe each other and the girl drops the 1st message.**

Improvement Goal:  The goal is to increase the date to match ratio and to hence increase *user engagement* and *retention*.

# User Persona

## Person who could initiate a date after matching, but got stood up

### Jasmine

Age- 22
Gender- Non-Binary
Occupation- College student
Location- Bangaluru

Bio:
They are a student who attend classes on weekdays and go out on weekends, looking for casual relationships, proud of their preference

Goals: Want to meet someone fun and of the same preference.

Pain Points: They get stood up often which is a waste of their free time in their stressful student life.

## Person who could initiate a date after matching, but cancelled

### Priya

Age- 25
Gender- Non-Binary
Occupation- Nurse
Location- Bangaluru

Bio:
They are working in a hospital, dont have fixed working hours, fear of being judged for their preference.

Goals: They want to meet someone like them, who accepts them for their fears and odd job timings.

Pain Points: They don't get a chance to explain themselves if they cancel on a date, so most matches are getting wasted

## Person who is in support of going on a date

### Rahul

Age- 35
Gender- Male
Occupation- Top manager
Location- Lucknow

Bio:
He loves his 9-5 job. Passionate about meeting new people and going to new places, extroverted

Goals: Looking for serious relationships and fun people

Pain Points: After matching, the person on the other side doesn't seem interested in the conversation

## Person who is not in support of going on a date

### Anjali

Age- 33
Gender- Female
Occupation- Professor
Location- Lucknow

Bio:
She is interested in academic discussions, isn't comfortable going out with strangers, introverted

Goals: To meet someone who is very interesting, and is worth spending time to go on a physical date

Pain Points: She has many options to choose from, and is affected by the paradox of choice so she isn't focused on a few potential dates

# Solutions

## 1. Compulsory video and photo verification of all profiles

- We conducted a few user interviews and realised verification creates a large impetus to swipe right on a profile, so probability of getting a match increases. It also reduces the awkwardness involved with asking the partner to verify, thus facilitating better conversations.
- The current verification system is easy to bypass.
- Hence we recommend video verification with a randomly assigned gesture so that the process is robust.
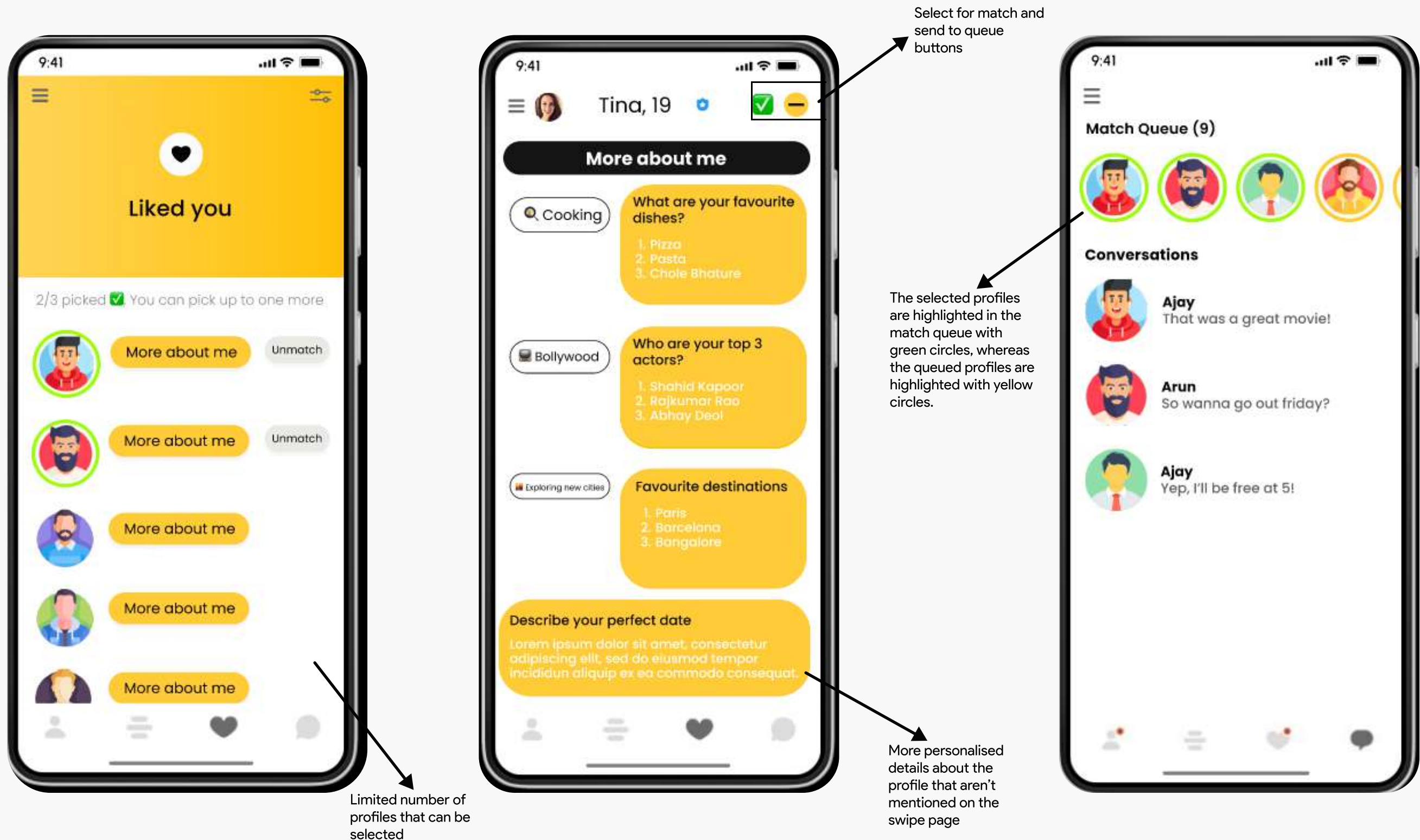- All users will have to verify their profile after signing up on the app.

## 2. Bumble MatchPicker

- Let's say you have x number of matches, you can only select [x/3](floor operator) people to message first. (We have come to this number after taking some user interviews, where we got to know that approx. 30% of matches have a proper conversation with each other and the rest only send 1 text or so).
- The message should go out within 8 hours of selecting. They can access the remaining matches only after they drop a match. We could have more personalised interests, unique questions, hobbies, conversation topic interests etc, which could be shown to the opposing user. They could use this as an additional basis for selection of their best x/3 matches.

## 3. Bumble Date Scheduler with Rewards system

- We have noticed that the app does nothing to reward/punish users who turn up/cancel on the date for no reason. We want to improve accountability and reward users on our app. This can be done with strategic partnerships with restaurants, popular date locations etc.
- The app can also track how many dates were successful on the app, and directly use that as a metric to improve matching algorithm based on how the dates were honoured.

# Bumble MatchPicker



**Select for match and send to queue buttons**

**Liked you**

2/3 picked ✅ You can pick up to one more

More about me — Unmatch

More about me — Unmatch

More about me

More about me

More about me

**Tina, 19**

**More about me**

🔍 Cooking — What are your favourite dishes?
1. Pizza
2. Pasta
3. Chole Bhature

Bollywood — Who are your top 3 actors?
1. Shahid Kapoor
2. Rajkumar Rao
3. Abhay Deol

Exploring new cities — Favourite destinations
1. Paris
2. Barcelona
3. Bangalore

Describe your perfect date
Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididun aliquip ex ea commodo consequat.

**Match Queue (9)**

**Conversations**

**Ajay** — That was a great movie!

**Arun** — So wanna go out friday?

**Ajay** — Yep, I'll be free at 5!

The selected profiles are highlighted in the match queue with green circles, whereas the queued profiles are highlighted with yellow circles.

Limited number of profiles that can be selected

More personalised details about the profile that aren't mentioned on the swipe page
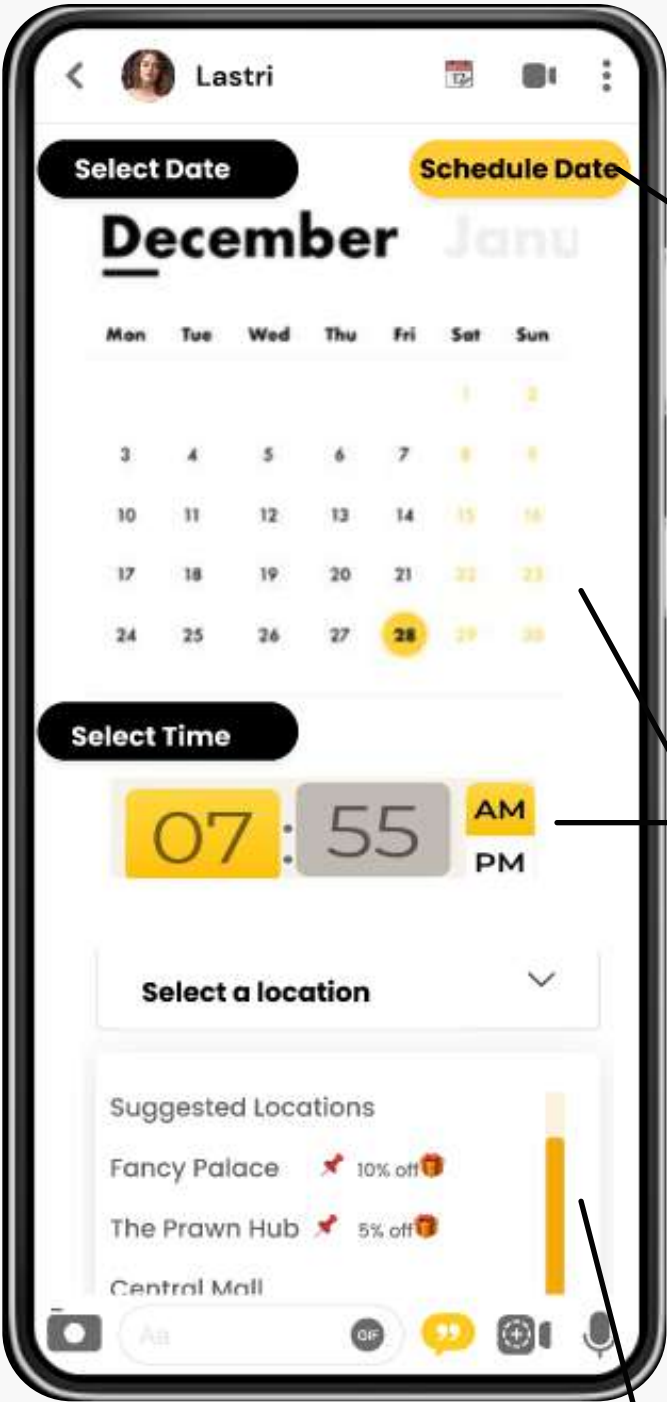
From all of the profiles that show Tina's mutually liked, Tina can pick 1/3rd of them to text (rounding down, with a maximum of 5 profiles at once).
Eg. If Tina has 6 mutually liked profiles, she can pick two of them to text,
    If she has 40 mutually liked profiles, she can text a maximum of 5 people.

She can text more profiles from the match picker only if she unmatches with a profile she's already matched with.

# Bumble Date Scheduler with rewards system



Emergency Cancel button

**Screen 1 (Lastri):**

Select Date — Schedule Date

December / Janu

| Mon | Tue | Wed | Thu | Fri | Sat | Sun |
|---|---|---|---|---|---|---|
| | | | | | 1 | 2 |
| 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 17 | 18 | 19 | 20 | 21 | 22 | 23 |
| 24 | 25 | 26 | 27 | 28 | 29 | 30 |

Select Time

07 : 55  AM / PM

Select a location

Suggested Locations

Fancy Palace 📌 10% off 🎁
The Prawn Hub 📌 5% off 🎁
Central Mall

**Screen 2 (Lastri):**

Current Location: Fancy Palace

Enjoy your Date :)

✅

Tina(You) Arrived  &  Lastri Arrived

Coupon Code Unlocked! 🔓

Use code BUMBLEDATEFP for 10% off

**Screen 3 (Tina):**

Current Location: Ruby Hospital

Emergency Cancel

Scan QR from partner's phone to verify date

Tina Arrived(waiting for 15 mins)  &  Lastri (You)

Coupon Code locked! 🔒

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**Annotations:**

Date Scheduler Button on the chat page

Preferred Date and Time scheduler. The date will be accepted only if both the parties agree to the date and time.
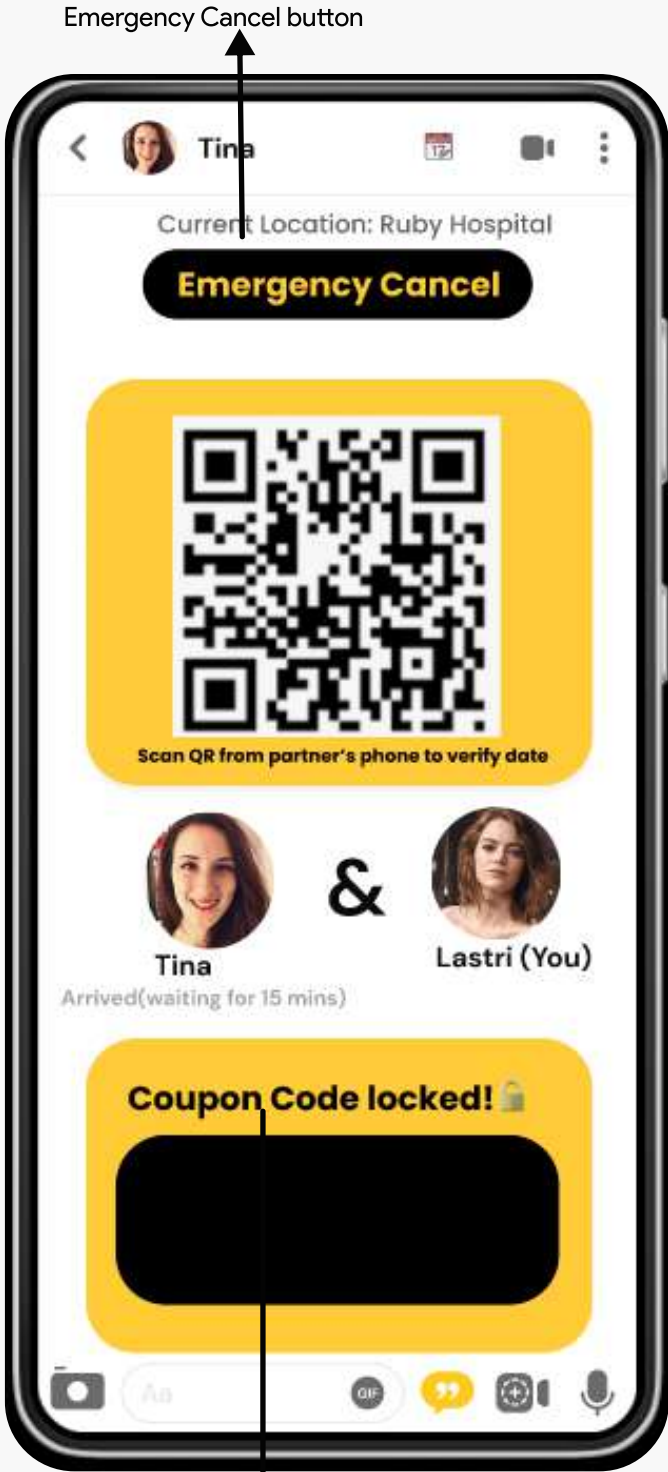
Suggested Date Location page along with discounts info
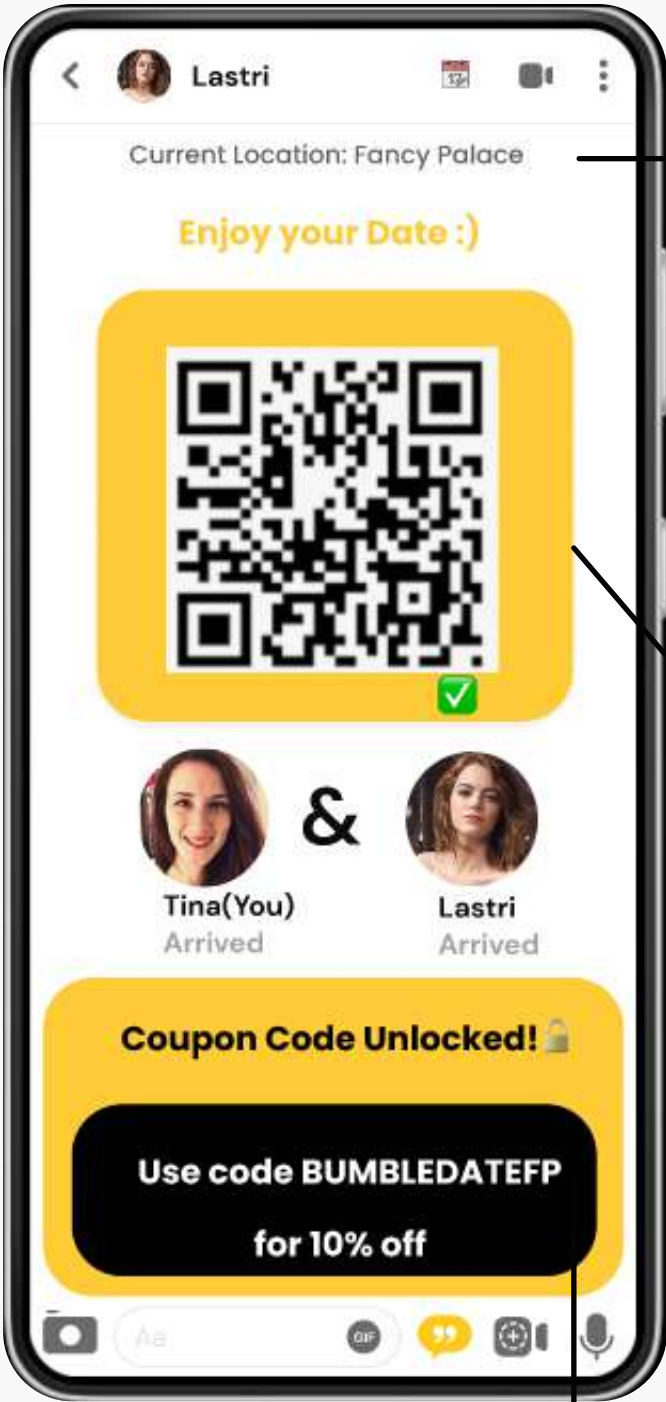
Current Location of Lastri is displayed and the location access will be asked whenever they open the app, and will be visible to only the matched partners.

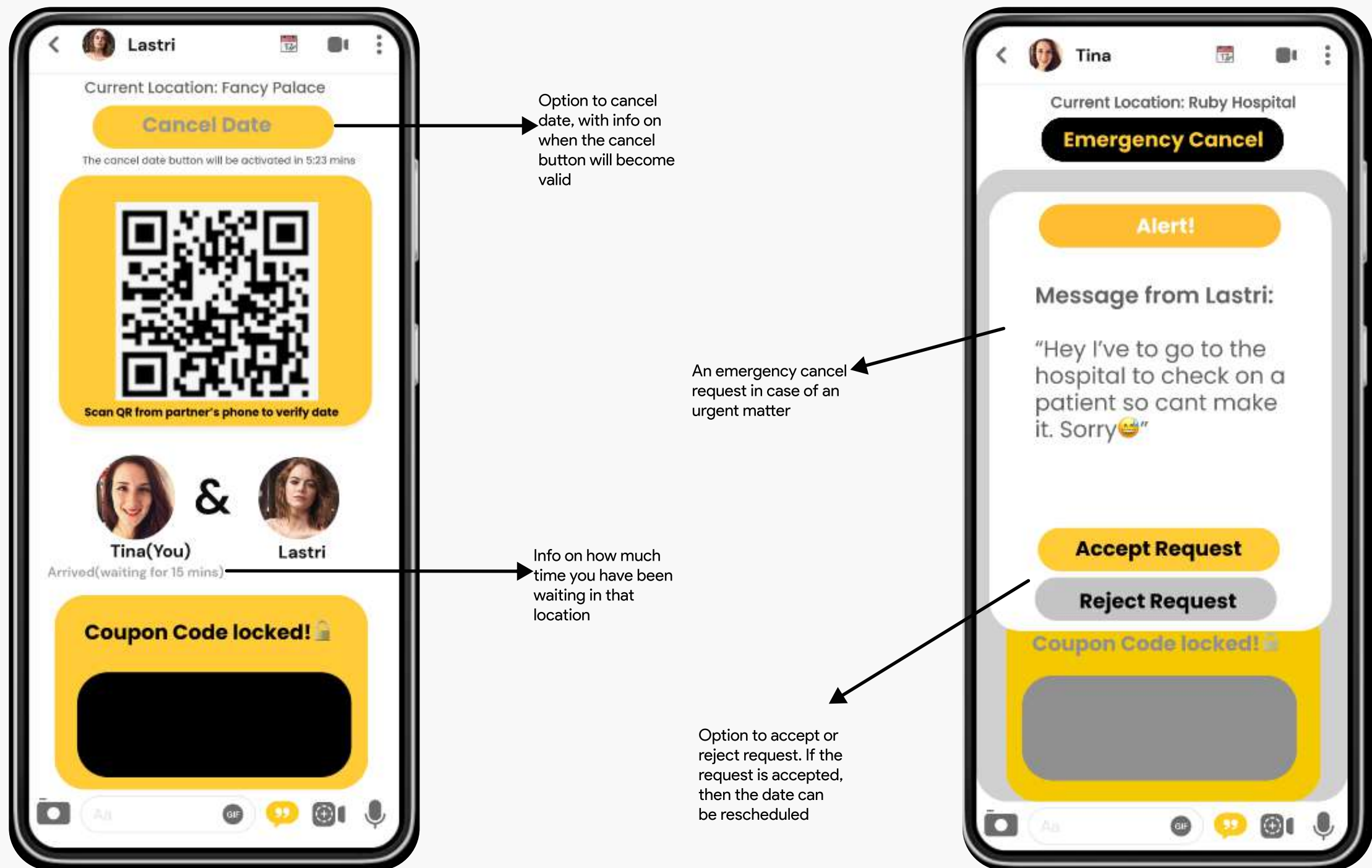QR code to verify with your partner that both have arrived at the date location.

Once the QR is verified, then the coupon code is unlocked!

Coupon Code locked as the verification hasn't happened yet

# Bumble Date Scheduler with rewards system



**Left phone (Lastri chat):**

Lastri

Current Location: Fancy Palace

**Cancel Date**

The cancel date button will be activated in 5:23 mins

Scan QR from partner's phone to verify date

Tina(You) & Lastri

Arrived(waiting for 15 mins)

**Coupon Code locked!** 🔒

**Right phone (Tina chat):**

Tina

Current Location: Ruby Hospital

**Emergency Cancel**

**Alert!**

Message from Lastri:

"Hey I've to go to the hospital to check on a patient so cant make it. Sorry 😅"

**Accept Request**

**Reject Request**

**Coupon Code locked!** 🔒

**Annotations:**

- Option to cancel date, with info on when the cancel button will become valid
- An emergency cancel request in case of an urgent matter
- Info on how much time you have been waiting in that location
- Option to accept or reject request. If the request is accepted, then the date can be rescheduled

In case the emergency request is accepted, then the parties involved can reschedule the date. At the same time, we will ensure that Tina's profile is now on spotlight for 2 weeks on our algorithm. In case the emergency request is rejected, then the date plan has failed. Tina will now be on the spotlight for two weeks and at the same time Lastri will recieve a soft ban for a week.

# Prioritization

We have decided to prioritize *Bumble MatchPicker* and *Bumble Date Scheduler* and Rewards system as our additional features.

| Solution | Impact | | | | | Cost | | Impact Sum(I) | Cost Sum(C) | I − C |
|---|---|---|---|---|---|---|---|---|---|---|
| | Activation(10%) | Engagement(40%) | Retention(40%) | Revenue(5%) | Referral(5%) | Dev Time(40%) | Operational Efforts(60%) | | | |
| Bumble MatchPicker | 2 | 3 | 2 | 3 | 2 | 3 | 1 | 2.45 | 1.8 | 0.65 |
| Bumble Date Scheduler and Rewards system | 3 | 2 | 3 | 1 | 3 | 2 | 3 | 2.5 | 2.6 | −0.1 |
| Compulsory Profile Verification with video | 1 | 1 | 1 | 2 | 1 | 1 | 2 | 1.05 | 1.6 | −0.55 |

# Metrics to track our features

We have written the user journey and have come up with relevant metrics according to it.

## Bumble Date Scheduler and Rewards sytem:

| User Journey | Metric | Timeline |
|---|---|---|
| User selects schedule date option with time, date and location | Increase in No. of dates proposed/no. of matches | |
| | Increase in No. of suggested locations selected/no. of dates proposed | |
| Opposite user accepts date invite and arrives at location | Increase in No. of dates finalised / no. of matches | |
| | Increase in no. of times coupons were used/no. of times dates finalised | |
| Opposite user accepts date invite and doesn't arrive at location | Decrease in no. of times cancel button was used/no. of dates finalised | Monthly |
| | No. of times emergency cancel button was used / no. of dates finalised | |
| | No. of times emergency cancel request was accepted / no. of times emergency cancel button was used | |
| Opposite user doesn't accept date invite, suggests new date | Increase in no. of dates finalised / no. of dates proposed | |
| | No. of new dates suggested / no. of dates proposed | |
| | Decrease in no. of dates denied with no new date suggestion / no. of dates proposed | |

## Bumble Match Picker:

| User Journey | Metric | Timeline |
|---|---|---|
| Sees about match info | No.of times >=10 secs was spent reading the about me/no. of times the about me was opened | |
| | No. of profile "more about me"'s checked/ no. of mutually liked profiles | weekly |
| Selects/Doesn't select profile | Meaningful match conversion rate = Decrease in number of matches/ no. of mutually liked profiles | |
| Texts [x/3] people, likes only 1 person, gets to add remaining people to complete | Decrease in no. of unmatched profiles / no. of matches in Match Picker | monthly |

# How much can we increase the ratio from 1/15?

Avg. no. of swipes performed by women per day:  10
No. of mutual swipes for women per day: 70% of 10 = 7 mutual swipes
No. of matches for women per day from mutual swipes:  70% of 7 = 5 matches
The remaining mutually swiped profiles are left as it is
No. of dates asssuming 1/15 date to match ratio:0.33

With our **MatchPicker feature,** we can assume that the number of dates remains constant.
No. of mutual swipes for women per week: remains constant: 70% of 70 = 50 mutual swipes
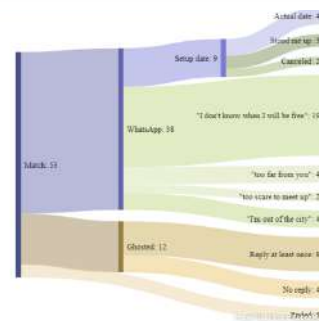No. of mutual swipes for women per day remains constant: = 7 mutual swipes per day
But,
No. of matches  for women per day now becomes: [7/3] = 2 new matches per day
So date to match ratio becomes: 0.33/2 = 2.5/15

**So now the date-to-match ratio has increased to 2.5/15, a 2.5x increase.**

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**Date-Scheduler:**
We are assuming data from the attached article:



The number of dates stood up are: 3/53 % ~ 6%
Number of dates cancelled are: 2/53 ~ 4%
The number of dates stood up can reduce to : 1/53 ~ 2% (as the penalty imposed for standing someone up is very severe)
Number of dates cancelled now reduce to: 1.75/53 ~ 3.5% ~ (as they can now reschedule their date and also have incentives for choosing to go on a date)
There is also a decrease in the number of dates that can't be scheduled due to clash in timings.
Currently it is at 19/53% ~ 36%.
Let's assume that 1/3rd of  these excuses are genuine, and these can be resolved  using our scheduler.
It will now reduce to :  2/3 of 36%  =  24%. This will be around 6 people.
The chances of all these 6 people going on dates is around 70% of 6 = 4.25 people(From given data, the initial chances of a succesful date was 4/9. Now 2 people who stood up will go on dates, and 0.25 people will not cancel their dates.So the ratio increases to 6.25/9 ~ 70%)

The dates that are succesful now are: 4.25 + 2.25 = 6.5 people will go on a date. There is an increase to 6.5/53 ~ 12%.
**Now 1.85/15 is the new date to match ratio.**

We aren't considering Non-binary users as they form a negligible number of users in India.
All of the numbers that we have considered are from the article (shorturl.at/cimn1)
statement or from user interviews and their perceptions about these numbers.