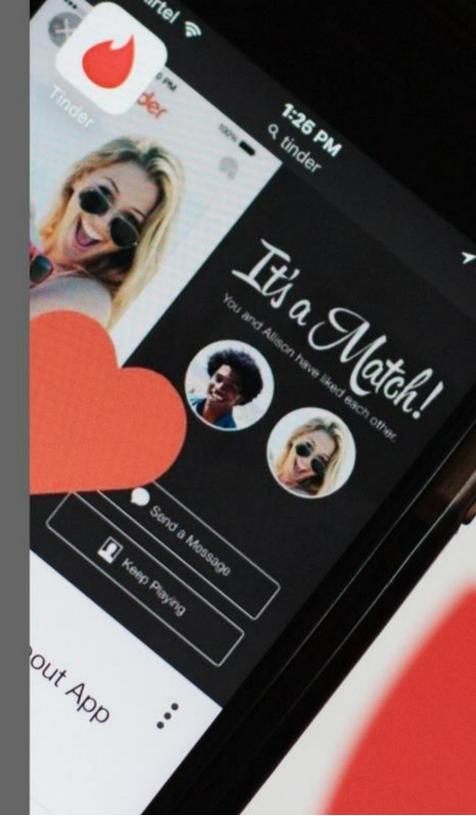


# Prompt Softech Data Estimate

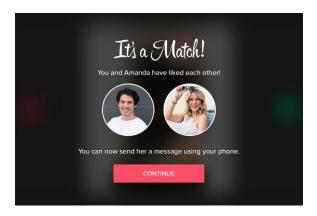
# HOW MUCH DOES IT COST TO MAKE AN APP LIKE TINDER?

White Paper by Prompt

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# Introduction



#### tinder



How was it like dating in the era of 60s or 70s, with no social media, or phones, or laptops to strike a conversation with your significant other? Back then, walking up to your crush, asking out for a date, and expressing love wasn't as straightforward and spontaneous as today. In our day, we've tons of dating apps where you can find millions of people like you searching love and instantly striking a cord with them. Swipe them left or right, send out a heart, like or pass, track, match up, send a message, or do anything that finds you a hook-up with the prospect you like. All you need is to fix a date, and off you go! Believe it or not, the technology has not only affected the way we live but also, the how we love.

So many people today are ditching the age-old ways of dating and moving toward the realm of online dating. No wonder what makes them hooked on their gadgets and mobiles for hours. Besides, such apps are designed and developed in a way that attracts and charm the users with exquisite design (UI) and easy navigation and operation, making the users dependent hook, line and sinker on them. That's how effortless finding your date had become, unlike the time when parents or the wisest person fixed matches in the family.

The eye-opening statistics have revealed that such apps have a far number of subscribed users than any other app on Play Store or App Store. And Tinder is one of the most popular and highest ranking dating apps <u>sparking 26 million matches</u> <u>every day</u>, and available in over 40 languages worldwide at the moment. As of July 2016, Tinder was rated the <u>most popular dating app on iOS</u> <u>platform with 11 million global installs</u>, while standing second with <u>27 million downloads in</u> <u>Android</u>.

In an excerpt from the <u>Business Insider interview</u> with Sean Rad, the founder and CEO of Tinder, he mentions, "We've made 20 billion matches since we started [in 2012]. Our mission is to create new connections and bring the world closer together and help people meet others they otherwise wouldn't have met."

# The Working of Tinder

# Tinder shows you interesting people nearby



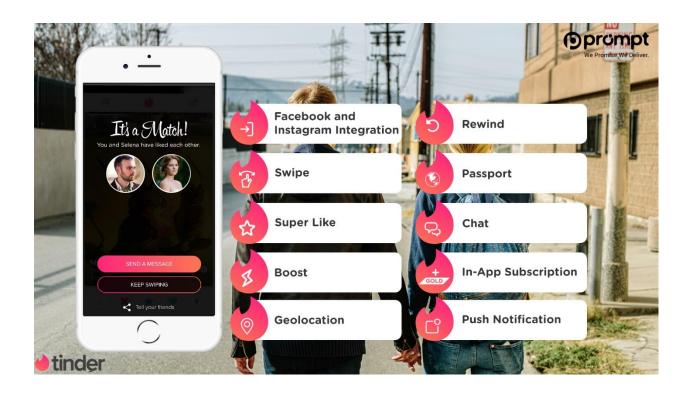
Tinder is a location-based dating site and dating app that lets you socialize and meet new people. Apparently, there's no registration process required to use the app. The users just need to log in with their Facebook accounts and the app gathers all your information from there. Based on your search preferences, mutual friends and shared interests, Tinder suggests matches that are most near to you according to your geographical location.

The app analyzed your data and based on your activities, shared interests, mutual connections and geographical location; it suggests potential matches which are in your proximity. Looking at their profiles, you can either swipe left to dislike the user or swipe right to express interest. If two users swipe right on one another's photos, Tinder establishes a mutual match and enables chatting between them. The app precludes users from knowing other users' selections unless two people swipe right on each other's profiles. Tinder does all the trick with its exquisite design and simplicity which makes it one of the most soughtafter dating apps.



Launched on September 12, 2012, by two childhood friends Sean Rad and Justin Mateen who collaborated as the founders of Tinder, the app since then has garnered a fair share of admiration and allegations. Similar to other apps, Tinder has transformed over the years which has dramatically impacted its user experience and credibility. It was initially released in App Store for iOS devices but soon also went live for Android in 2013. In the early years, there was clicking function with a red 'X' or green 'Heart' to dislike or select photos respectively, while the swiping mechanism came in much later. Tinder's demographic kept expanding with user base comprising of different ages, and by 2014, it had hit 1 billion matches. In 2015, the company introduced two new features namely Rewind and Super Like followed by the launching of Tinder Boost feature in 2016. And in March 2017, Tinder finally came out with Tinder Online, a web version of the dating app for desktop users. In the next month, Tinder Gold was introduced for Tinder Plus users that unleashed access to many exclusive features like Unlimited Likes, Rewind, Passport, Super Like, Boost, and others by paying additional charges as a paid subscription.

# The Features of Tinder



What makes Tinder so endearing that people from millennials to oldies go gaga over it? Perhaps, a minimal yet appealing design and easy controls make Tinder an extensively used dating site with 20 billion matches to date. The app works on simple theory— Swipe. Match. Chat. Date. That is all a user needs to do to find a potential partner. Let's walk through the plain sailing features fused into the app and find out how each of the functions that will help us assess an approximate cost of development of each, hence, the whole app.

#### Facebook and Instagram Integration

Users can sign up for Tinder using either of the two methods—Facebook account or phone number. When you sign in using your Facebook account, the app uses your information, mutual connections and interests from your account to find potential searches for you. Once you log in, you can also integrate your Tinder profile with an Instagram account for the users to see your photos.

### Swipe

It is because of this central feature that Tinder has caught people's eyes. When you log into the app, you have access to millions of user profiles which you can like or dislike based on your interest. You swipe right (or tap Green Heart) to like someone or swipe left (or tap Red Cross) to pass. If that individual swipes you back, it results in a match, and you can now chat with your match.

# Super Like

There may be multiple people you may like and swipe right their profiles, but there're a few of those who you think to stand out from the rest. To let them know that you super like them, you just swipe up or click the blue star icon below their profiles, and they'll instantly be notified about it. While they're swiping profiles, your profile appears with a blue border and a star showing that you super liked them. And if they swipe right on your super like, it'll result in an instant match. All the Tinder users can super like one profile a day for free while Tinder Plus and Tinder Gold users have the advantage of five super likes every day.

#### Boost

Tinder Boost feature enables you to maintain one of the top profiles in your area for thirty minutes. It increases your chances for a match and gains you ten times more profile views than usual. Tinder users can subscribe to Tinder Plus or Tinder Gold to activate Boost (purple lightning bolt icon) and get one free Boost per month. Tinder users can buy as many Boosts as they want at any time while Tinder Plus and Tinder Gold subscribers receive up to one free Boost every month.

### Rewind

This feature helps you go back to the last profile you accidentally swiped left or rejected. Tap on the yellow arrow icon beneath the profile and swipe again. The option is available only for Tinder Plus and Tinder Gold users, and they can rewind just the last swipe.

#### Passport

You can filter searches by setting/editing distance in the Settings page of your profile. It helps Tinder find matches that are in your proximity. However, there's a feature called Passport that allows you to see people from all over the world. You can search matches by selecting a city or pointing on the map to connect with people from the place you choose. You can navigate between your current location and destinations you like. Tinder Plus and Tinder Gold users can change their location any number of times and match with people anywhere in the world.

# Chat

The Chat feature allows users to chat with another only if they've expressed mutual interest. Until then, the Chat option is disabled.

### In-App Subscription

Tinder provides two in-app purchase options in the name of Tinder Plus and Tinder Gold. Users can subscribe to any of these plans and get access to premium features like Unlimited Likes, Passport, Rewind, one free Boost, and five Super Likes per day along with an additional feature Likes You available in Tinder Gold which lets you see people who like you before you swipe them.

# Technology and Platform to make an app like Tinder

But what goes into making such an app used by billions of people? Each feature of the app has taken hours of brainstorming, development and testing to appear like the one you see there. There's a lot of programming and tools working behind the distinctive features of Tinder. Let's analyze the technology stack implemented to make Tinder.

#### Programming Languages

The app implements three programming languages—JavaScript, Python, and HTML5—that make it highly interactive, dynamic and platform independent. JavaScript provides a rich front-end to the app, makes it fast & responsive, and supports all kinds of devices like Phones, Tablets, and PCs. Python is easy to learn and code which is why developers prefer it while programming. It is cross-platform, safe and provides extensible support libraries to reduce the length of the code. Plus, HTML5 is the reason for all the content you see in place, and the app's consistent behavior across different browsers, old or new, while supporting rich media elements.

#### Mobile Platform

The company employs Amazon Web Services (AWS) to build and test the app. AWS allows

managing configuration of features, user authentication, implementing backend logic, push notifications, data storage, engaging with customers, reproduce issues & solve them, and tracking analytics into the app.

#### Database

To support and store such vast user data, the company employs **Mongo DB** and **Redis** as scalable database storage systems that extend the capabilities of holding the whole dataset in memory, automatic load balancing, easy administration, and replication.

### **Open Source Platform**

For designing custom maps, Tinder implements **Mapbox** that incorporates location features such as maps, search, and navigation in mobile and web applications. It renders vector maps in realtime, finds location all over the world by any address, shows live traffic and point-to-point directions on routes. It is an open source software where anyone can design and publish custom maps, and significantly contributes to open source mapping applications and libraries.

#### Security

Tinder has a large user base, consisting of sensitive user information like passwords and transaction details. And that is why it is very much necessary to maintain utmost confidentiality and prevent falling to vulnerabilities that compromise user data. Tinder holds active GoDaddy SSL certificates that build the highest level of encryption, security, and trust into the site and app.

# Cost Components and Timeline

We're now aware of what all technologies and tools go into making a dating app like Tinder. Any app you develop takes an elaborate plan consisting of components, resources, timeline, and cost to accomplish its purpose. Price is a crucial factor that partly decides if it's frugal to go ahead with the project or not. The cost of development of an app depends on how complicated is the app architecture and how particularized you want the features to be. However, if you're planning to build an app like Tinder loaded with fantastic features, you'd better be ready to go over-budget on it. Here's the list of components that you must consider to calculate the cost of development.

- 1. Backend Development
- 2. Frontend & Web App Development

3. Design/UX

4. Native Platform development

5. Quality Analysis

A team of developers are deployed dedicated to building each component mentioned afore. And the cost of development component is calculated based on hourly rates for each and number of resources involved. Hourly rates may vary anywhere between \$20 and \$150 country-wise as we mentioned it previously in a similar whitepaper on WhatsApp. If we take median \$50 per hour as an estimate, the cost reaches around \$90,000 for 1300 hours. Albeit, you can save more money if you hire our <u>app developers</u> at Prompt Softech at \$35 rate.

A general estimate of the team involved in the making of an app like Tinder would consist of at least:

- 2 Mobile App Developers (1 for iOS + 1 for Android)
- 2 Web Developers (1 for Frontend + 1 for Backend)

- 1 Quality Analysis Engineer
- 1 Designer
- 1 Project Manager

For the app to be developed well and as planned, each component must be devoted substantial hours to be designed, tested, and approved. Besides, there may be instances when you might have to allot additional time due to some unexpected errors surfacing in development or testing stage which may push the delivery date, costing you extra charges. Though, such surplus expenses could be cut down if things are taken care of from day one of commencement of the project. Here, we draw the cost estimate considering the mean time required for developing each component.

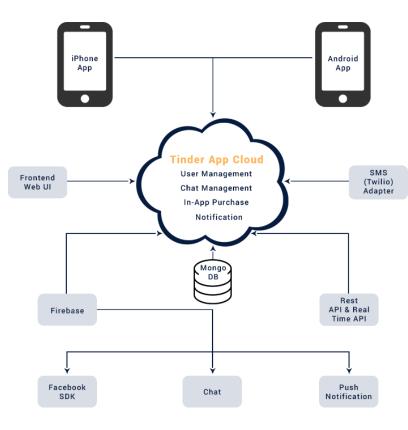
#### Backend (Web), Mobile, Database, and Cloud Hosting

Tinder implements Python language for backend programming. Alternatively, you can use .NET Core Framework with MVC 6 architecture that provides an excellent platform and support for building web APIs and services that reach a wide range of browsers and mobile devices. ASP.NET Core is a lightweight, open source, and highly testable framework where a cloud-optimized app could be quickly built with cloud support in MVC 6.

While making a mobile app for iOS platform, consider using Xcode IDE, Swift 4 programming language and SQLite database for making development easier with fantastic speed and more control. Swift 4 is a powerful, intuitive, and robust open-source language that supports multiple non-Apple platforms and is compatible with its previous versions. And SQLite is the most widely deployed database engine which requires zero-configuration and is compact. As far as the Android version is concerned, Android Studio provides unified flexible, and feature-rich code editing environment with extensive tools and frameworks to develop optimized apps for all kinds of Android devices. It has Firebase and Cloud Integration that allows adding services like Notifications, Analytics, and Authentication. You can efficiently address performance, correctness, and security issues. Android SDK could be bundled with Android SDK to get more access to the best tools.

Our development team does a valuation that circa 1300 hours would go into developing the app for all platforms considering backend, setting up database architecture, and configuring cloud services to host the app.

The explanatory chart below depicts the entire architecture of the app similar to Tinder.



### Frontend

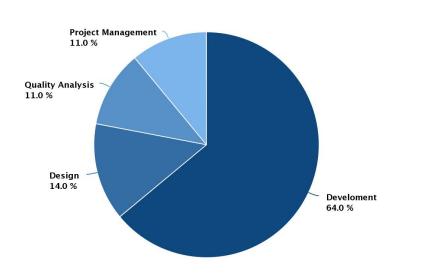
For the User Interface (UI) or Design purpose, Angular 2 and Bootstrap are excellent front-end framework tools. Angular two allows for creating progressive crossplatform apps, add new controls on the fly, and create high-performance animations easily. Bootstrap is a responsive and mobile-first prevailing front-end framework that allows reuse of readymade code blocks to speed up development. It can be customized as per the designs of your project using pre-styled components, easily integrated with diverse platforms and frameworks, and includes the functionality of JavaScript components leaving out the need to write scripts at all.

A minimum 400 hours would be consumed to design frontend as estimated by our development team.

### The Final Word

The cost of software and application development varies among distinct countries. The rates depend upon the workforce employed and some hours dedicated to development. The charge per hour significantly affects the total cost of the project. The US and UK charge around \$100-150, the European countries impose \$50-80 while the Asian countries levy the cheapest hourly rates fluctuating between \$20-40. Since the prices keep oscillating, the developer team at Prompt Softech considers an average \$35 hourly standard for developing a messaging app like Tinder.

| Category                             | Hours | Hourly Rate (\$) | Total Cost (\$) |
|--------------------------------------|-------|------------------|-----------------|
| Mobile Development (iOS + Android)   | 1300  | \$35             | \$45,500        |
| Web Development (Frontend + Backend) |       |                  |                 |
| Design                               | 400   | \$25             | \$10,000        |
| QA                                   | 300   | \$25             | \$7,500         |
| PM                                   | 250   | \$30             | \$7,500         |
| Total                                | 2250  |                  | \$70,500        |



Timeline to build an app like Tinder

Our development team consumes a timeline length of 280-300 days if it has to develop a Tinder-like dating app. The Development phase (for both Mobile and

Web) of the app consumes a little over half of the total time, i.e., 64%, while the Designing (14%), Quality Analysis (11%), and Project Management (11%) phases require quite less time comparatively.

As a result, we see that the total cost of developing an app like Tinder by tallying the values of all the components reaches approx. \$70,500. This price includes the development of the dating app for both Mobile (Android and iOS) and Web platforms. We emphasize upon the fact that the factors mentioned above differ geographically, hence the overall cost. If you hire a team of developers from other countries, you may have to shell out up to \$140,000 or more accordingly. Therefore, we at Prompt Softech, recommend that well-defined estimate including all the components must be calculated before you step into the development phase. And, if you hire us, we can help you save a lot of money and time too!

If there's any idea on your mind which you wish to conceive into a block-buster app or website and need assistance on the same, we're right here to help you out! Drop us an email with your requirements and we promise to get back to you as early as we can.

### References

- 1. https://en.wikipedia.org/wiki/Tinder\_(app)
- 2. <u>https://www.help.tinder.com/hc/en-us/articles/115004647686-What-is-Tinder-</u>
- 3. https://thinkmobiles.com/blog/how-much-cost-make-app-like-tinder/
- 4. <u>https://expandedramblings.com/index.php/tinder-statistics/</u>
- 5. <u>https://www.statista.com/statistics/607160/top-ios-dating-apps-worldwide-downloads/</u>
- 6. <u>https://www.statista.com/statistics/607517/top-android-dating-apps-worldwide-downloads/</u>
- 7. <u>https://www.businessinsider.in/What-its-like-to-launch-then-get-fired-from-the-1-billion-startup-you-built/articleshow/57151775.cms</u>

- 8. <u>https://www.forbes.com/sites/stevenbertoni/2014/11/04/exclusive-sean-rad-out-as-tinder-ceo-inside-the-crazy-saga/#40535afb3ccd</u>
- 9. https://techcrunch.com/gallery/a-brief-history-of-tinder
- 10. <u>https://www.help.tinder.com/hc/en-us/categories/115000755686-A-Guide-To-Tinder-</u>
- 11. https://aws.amazon.com/
- 12. <u>https://www.mapbox.com/</u>
- 13. https://blog.semaphore-software.com/asp-net-mvc6-features.html
- 14. <u>https://www.devsaran.com/blog/10-best-reasons-use-bootstrap-amazing-web-designs</u>
- 15. https://developer.android.com/studio/features.html
- 16. http://jsfiddle.net/gekx8k75/5/