Revolutionizing Address Entry:

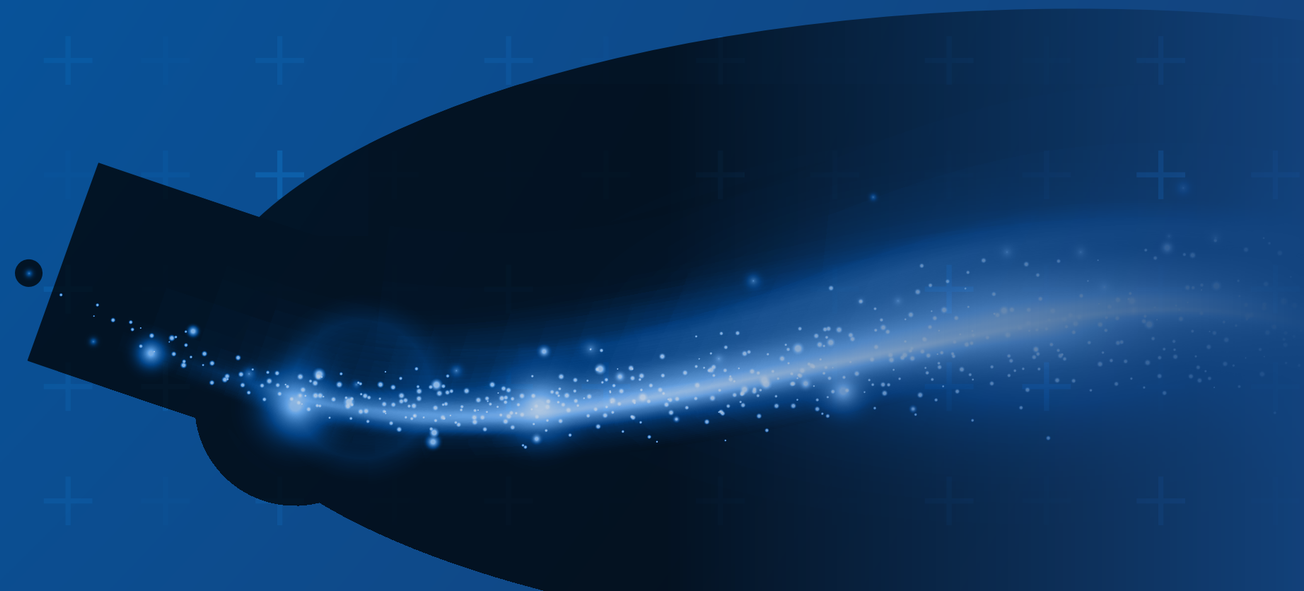
Magical Benefits of Address Autocomplete

smarty

Sneak Peek

+ Introduction
+ Key Benefits of Address Autocomplete
+ The High Cost of Not Implementing
+ Supercharging Checkouts with Zero Keystroke Autocomplete
+ Address Autocomplete Best Practices
+ Implementation Tips for Developers
+ Conclusion

Introduction to Address Autocomplete



You've no doubt received an email that had some variation of the signature "iPhone. iTypos. iApologize." or "Jill sent the message. iPhone sent the typos."

Researchers have found that we make an average of five times as many writing errors on our phones than on desktop computers.[1]

Unfortunately for those who care about accurate information and data, about half of website traffic today comes from mobile devices[2]— meaning business leaders and web developers need to take steps to ensure they're offering a helpful mobile user experience. Especially when you consider that many sites get more traffic on mobile but more conversions on desktop—a phenomenon known as the mobile commerce gap.[3]

In order to minimize mobile's lost conversions and maximize desktop's conversions, your online forms should be a key focus for user experience improvements. Your lead generation and eCommerce numbers will greatly benefit from a few form improvements.

Enter address autocomplete.

Did you know it took 2,000 years to build the Great Wall of China? Yikes! It's exhausting to even think about. With such an enormous project, the workers surely would've appreciated an easier way. Imagine, they start laying two bricks and, POP! The entire Great Wall springs up completed, exactly to standard, and along the exact path planned for it. Well, that's how address autocomplete works.

Address autocomplete is a useful feature you can use every time you order anything online. It automatically suggests addresses when users begin typing in the address. The feature helps businesses expedite form completions, prevent user error, and keep their databases clean and accurate.

Address autocomplete differs from Autofill, a web browser feature that allows users to save their information (on the browser or the OS) and use it on web forms. Additionally, if a user entered incorrect information when they first saved their autofill info, nothing prevents that bad info from being used repeatedly with every autofill.

Key Benefits of Address Autocomplete

When added to lead generation and checkout forms, address autocomplete helps businesses speed up form completion and improve form conversion rates.

In addition, small tweaks to the autocomplete API can help developers greatly improve the user's checkout experience.

Let's look at the business benefits of implementing address autocomplete in more detail.

SPEED UP ENTRY BY REDUCING FRICTION

When asked why your leads aren't converting, your marketing department may have blamed "friction." They didn't mean that lovely thing that enables you to start a fire by rubbing two sticks together for a long time. Friction is a general marketing term that describes any moment in a user's interactions with your brand that makes it difficult for the user to take action.

Friction could be a dissatisfying response from customer support, a coupon code that doesn't work, or a form that takes too long to fill out.

Address autocomplete keeps customers and prospects happy by moving them through your forms more quickly. The faster you can provide typeahead address predictions, the more pleased your prospects and customers will be.

Some address autocomplete providers return addresses that *look* valid. service like Smarty takes this further by predicting only addresses that are known to be valid, minimizing the number of keystrokes needed. Users see validated address predictions from the very first keystroke and can find the correct address in as few as the first 3-5 characters.

Goodbye friction!

CUT CHECKOUT ABANDONMENT

Address fields are among the most challenging for the user to complete, so it's no surprise that they're the second most common reason for checkout abandonment.

The more time it takes to enter an address, the higher the chance users will encounter frustration and abandon the form altogether. It's bad enough if it takes too much time to complete, but it's worse if the field won't allow the correct address to be entered.

A well-implemented address autocomplete allows users to quickly and easily enter their address by typing just a few characters. The form automatically suggests and fills in the rest of the address details. By providing a streamlined and user-friendly address field, businesses can improve the overall user experience, reduce abandonment, boost lead generation, and increase revenue with more transactions.

REDUCE TYPOS & ERRORS

Implementing address autocomplete in your forms reduces typos and errors by recommending accurate addresses at the point of entry - the absolute *best* time to make corrections . Address autocomplete is a simple way to prevent misspelled, invalid, incomplete, or even fake addresses from ever reaching your database.

This preventive measure is vital to maintaining database cleanliness and ensuring you have accurate data for business intelligence needs.

If you want to go above and beyond with your address autocomplete, use a service like Smarty that includes non-postal addresses and secondary address information like apartments, units, floors, suites. This will help you minimize incomplete data and reduce time spent finding missing address components.

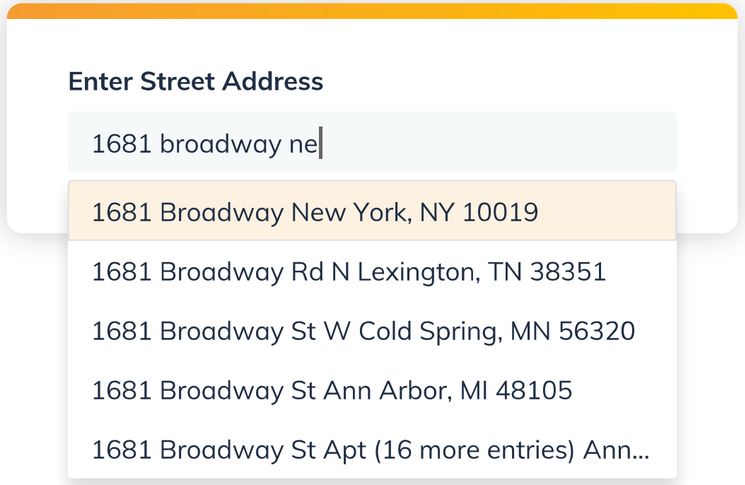
REDUCE COSTS OF BAD ADDRESSES

Whether you're collecting address info for shipping purposes, on-site service visits, insurance quotes, healthcare billing, or other financial services forms, you need to be sure you have the right address, or else your bottom line suffers.

UPS and other delivery providers use a method called range validation. They say if the number is between 1100 and 3300, for example, they'll consider it valid no matter what. Any slight typo in a house or building number within that range is considered valid. But the unlucky delivery driver that day certainly won't be able to find it!

Validating addresses from the very first keystroke helps prevent those errors. This is good for you because if your delivery service can't deliver your products to the listed address, you're likely out the cost of the item, the shipping, and possibly paying a return fee.

When it comes to using address info to direct technicians or sales reps to appointments, a clean, accurate, confirmed, address with secondary address information can prevent inefficient sales routes, missed appointments, and time wasted getting the right directions. This means your team can get to more appointments, sell more, and keep your customers happy, which brings us to our next point...



KEEP CUSTOMERS HAPPY

Email address, name, and home address are the most commonly requested pieces of information in forms.[4]

Entering the same information over and over again gets tedious. Autocomplete speeds up form entry and reduces the burden on the user.

In addition, it can be difficult for users to select from a long scrolling list of addresses—especially on mobile, if they're in a hurry, or overwhelmed. Autocomplete can be set up to give top priority to address suggestions close to the user's geographical location and limit results to a set of ZIP Codes, cities, or states. Using autocomplete to limit the results shown is a simple way to increase the ease of your form experience for the user.

"The advance of technology is based on making it fit in so that you don't really even notice it, so it's part of everyday life."

– BILL GATES

The High Cost of Not Implementing

Today’s world is fast-paced. We’ve become used to instant gratification. Any questions are answerable immediately with a quick online search or shoutout to Siri, Alexa, or Hey Google. Nearly anything can be ordered and delivered in less than two days.

Businesses and their investors need to implement software solutions that are efficient—without sacrificing accuracy. Your customers want instant results, whether that’s searching for a help article on your website or filling out a form.

The longer it takes to fill out a form, the more impatient your prospect becomes, and the more likely they’ll give up and move on.

Consider these risks of not implementing address autocomplete on your website:

USER ENTRY ERRORS

Without address autocomplete, users have to manually type in their address information, increasing the typo probability. Incorrect addresses result in incorrect deliveries, lost packages, inaccurate insurance quotes, the wasted time when assessors or service technicians go to the wrong location, and of course, irate customers.

INACCURATE DATA

People often enter addresses in different ways. They might accidentally leave off the house number, spell out or abbreviate directionals (north, south, east, west), or forget to include the ZIP Code.

When users enter incomplete or inaccurate address info, you’re stuck with a tangle of inconsistently formatted addresses in your database, causing potential issues in your CRM and setting you up for incorrect data analysis, lots of duplicates, and poor business intelligence.

POOR USER EXPERIENCE

Manually entering a full address is time-consuming and frustrating, especially on mobile devices. Having a bad experience on your website often leaves a user with a bad impression of your brand.Overall, 63% of online customers won’t return to a website after one bad experience.[5]

REDUCED CONVERSION RATES

A potential customer who doesn't convert is a waste of marketing and sales budgets. After spending a lot of money on marketing campaigns to drive users to your site, it's a shame for them to leave without engaging with your team. Often, a complicated, cumbersome, and lengthy form is what kills your conversion rates.

INCREASED CUSTOMER SUPPORT REQUESTS

If users struggle to enter their address—for example, if they don't know where to enter their unit number—they're likely to reach out to customer support and increase your call time.

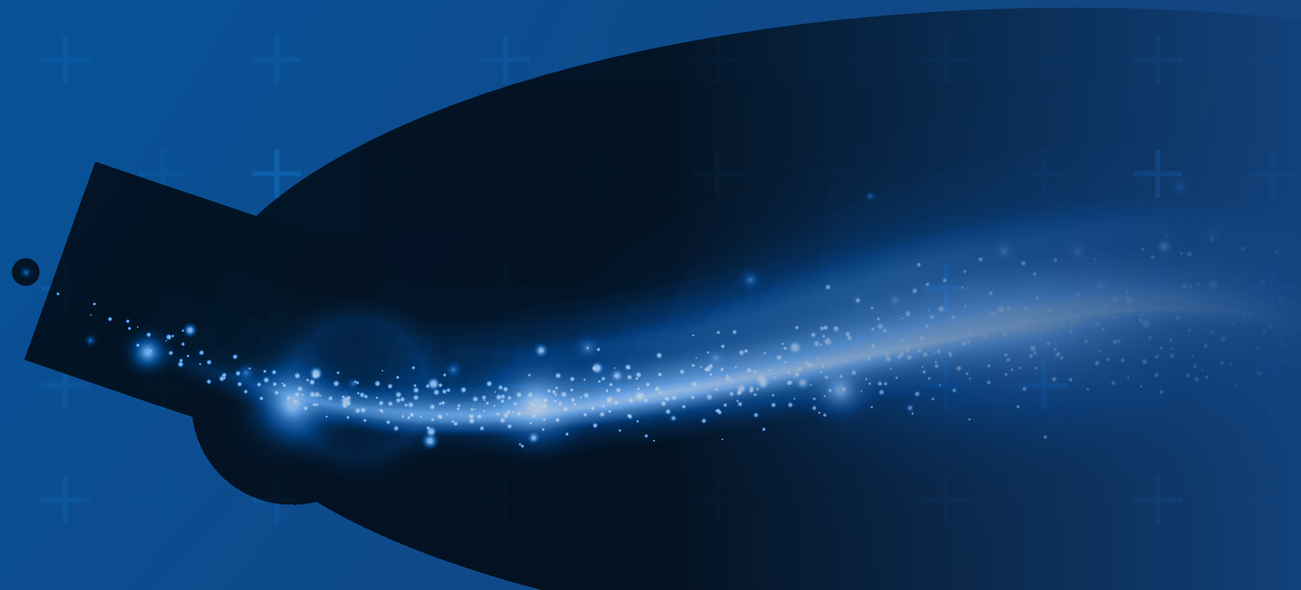
Address Line 2 is a common address field that allows users to add secondary address information, such as numbers for apartments, suites, PO Boxes, and other address designators. However, many users think this field is for ATTN, company name, C/O, or delivery instructions. They either input unnecessary info or skip it altogether, adding their secondary address information in the same field as their street name, for example.

Offering a field for Address Line 2 leads to confusion, validation errors, and incorrect addresses. Address Line 2 fields operate as a bandaid fix. However, it still puts a strain on your customer support resources and lowers their efficiency in responding to higher priority requests.

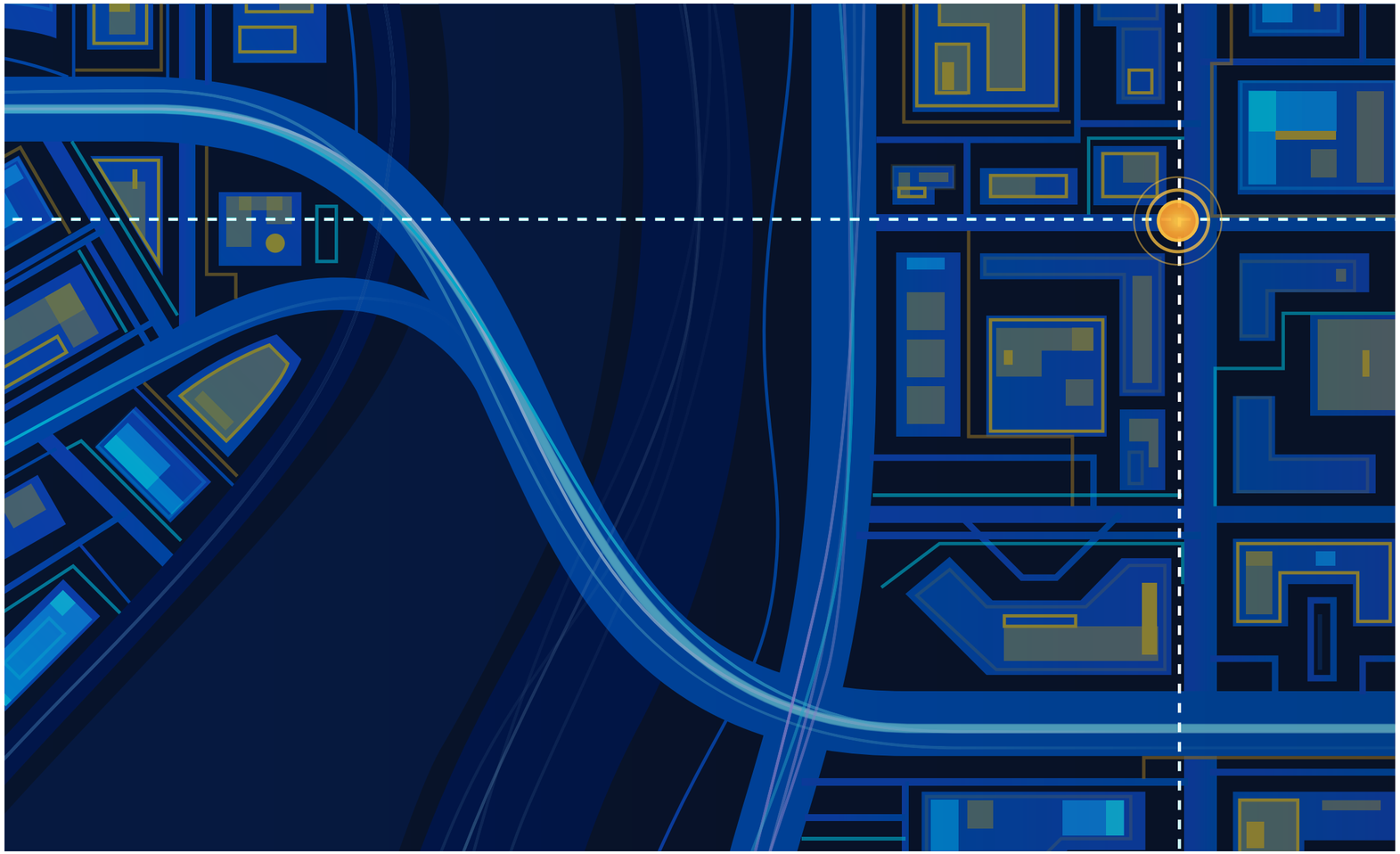
"Close only counts in horseshoes and hand grenades."

– FRANK ROBINSON, MAJOR LEAGUE BASEBALL PLAYER, COACH, & MANAGER

Supercharging Checkouts with Zero Keystroke Autocomplete



Wouldn’t it be magic if you could suggest valid address options before the user even enters a single keystroke in an address field?



Well, we’re location magicians, and we’ll show you how to work this magic into your forms.

Address autocomplete supercharged with high-quality reverse geocoding will help you achieve the holy grail of address entry: zero keystroke address autocomplete. Your customers won’t know what hit them, but they’ll be pleased as punch that their address entry is already complete.

What is reverse geocoding, and how does it facilitate zero keystroke autocomplete?

For starters, reverse geocoding is the process of converting a location (a set of latitude & longitude coordinates) into the nearest street address.

For zero keystroke autocomplete, your website or app can capture the precise location from the user’s device. By reverse geocoding the location, the nearest addresses can appear in a list to the user—BEFORE they enter a single character of their address.

By combining reverse geocoding with address autocomplete, the customer can select an address provided by reverse geocoding, or they can begin entering their address and see new suggestions automatically provided by the address autocomplete API.

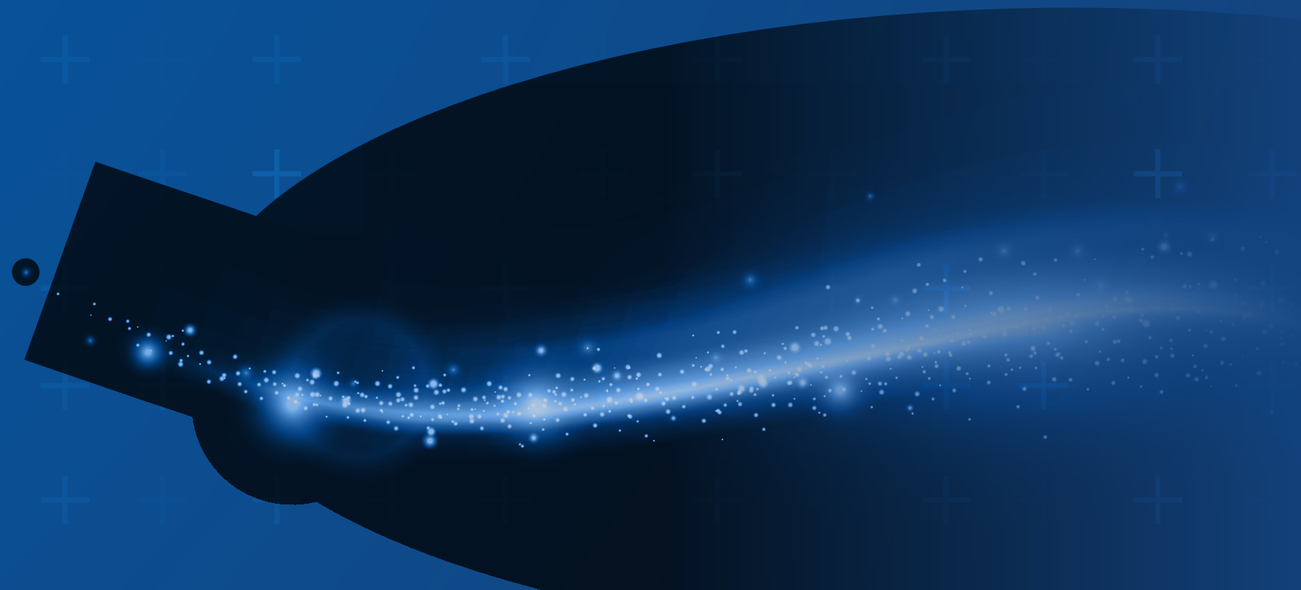
Using both APIs ensures the user gets a seamless address entry experience whether they're shipping to their current location, a location far away, or anywhere in between. Pairing reverse geocoding and autocomplete also ensures that users who have precise location disabled on their devices can still get the best possible checkout experience.

Smarty's reverse geocoding and autocomplete APIs never suggest fake addresses and help you reduce wasted lookups, false positives, and no-match addresses. This strategy provides the best possible matches, helps prevent entry errors, and makes address completion lightning-fast.

Benefits of Zero Keystroke Autocomplete

1. Reduced typos and errors
2. Reduced costs of bad addresses
3. Instant address entry
4. Higher form conversions
5. Happier customers

Address Autocomplete Best Practices



How do you know you're getting the most out of your address autocomplete setup? Follow these best practices to maximize your address autocomplete implementation and offer the best user experience.

CHOOSE THE RIGHT AUTOCOMPLETE TECHNOLOGY

There are a few different autocomplete methods, each providing different levels of accuracy.

Method 1

Mapping providers like Google focus on navigating you to an approximate location. This means their autocomplete doesn't factor in secondary addresses like unit or suite numbers. If you try to add an apartment number to your search, you won't get any suggested results.

Method 2

Some autocomplete providers use the street name, city, or state to suggest results that look real but might not be actual locations. For example, you might receive a suggested house number that doesn't exist on a street that does exist. This method verifies the street exists but not the full address.

Method 3

Here at Smarty, we do things differently. Our address autocomplete never returns fake results. Unlike the previous method, if a user starts typing in a non-existent house number, a true autocomplete won't give any suggestions that aren't real locations. This method can suggest a user's correct address much faster because it's only checking against real addresses as the user types.

Consider what you want your user experience to be and which method will most benefit your users.

Address Autocomplete in the Wild

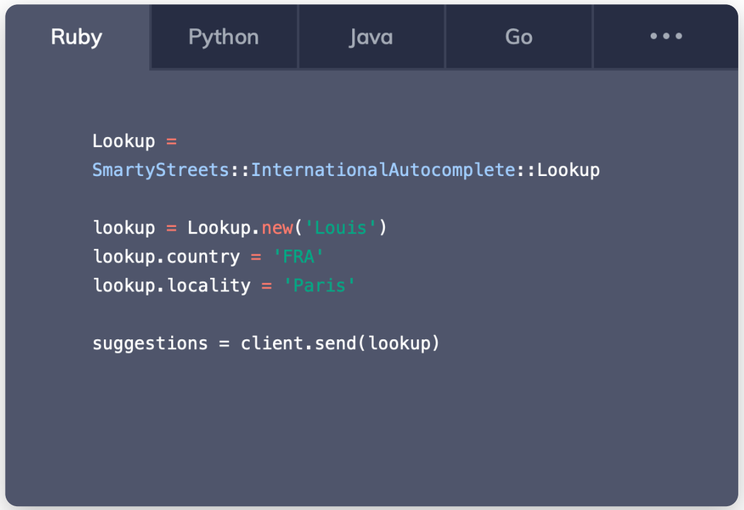
If you're sending technicians out in the field, you might think using Google's autocomplete method of just getting to the physical location of a building is enough. However, a more robust, precise autocomplete feature is worth it when time is money. Take Smarty client SalesRabbit, for example.

SalesRabbit uses Smarty's US Address Autocomplete to autosuggest start and end destinations for reps planning sales routes. Because US Address Autocomplete provides typeahead address predictions quickly and flexibly, it prevents typos, and sales associates can get moving sooner. Plus, it helps them find specific units and office suites.

CUSTOMIZE YOUR FORMS

Fields, keystrokes, and geolocation can all be customized.

Work with your developers when implementing an address autocomplete API to customize the settings to match your needs and desired user experience.



Form Fields

Each country has its own way of formatting addresses. You can customize your form fields to match a user's country or region, allowing for different formats for addresses, postal codes, and city names.

Alternatively, consider using a single text field for the address. This is incredibly flexible, fitting any address format, and it's easy for users who are cutting and pasting addresses from another source.

Both are good options, and your choice will likely depend on your user demographics.

Keystrokes

Some autocomplete providers charge based on individual keystrokes sent to their system to check for valid addresses. You can tell the API to send a request every three keystrokes or every five keystrokes or whatever number you want. This is a good way to limit the number of requests and reduce the cost of the autocomplete service a bit.

You can also program it to wait until there's been a 300-millisecond pause before sending any keystrokes to check for addresses. If a user enters and types out their complete address without pausing, there's no need to send each keystroke through for suggested addresses.

Geolocation

Autocomplete can be set up to give top priority to address suggestions within several miles of the user's geographical location and can also limit results to a set of ZIP Codes, cities, or states. Suggesting addresses close to a user's physical location or within an area can help a user choose the correct address more quickly. Geolocation isn't as precise as GPS, but delivers a rough location approximation.

Limiting results based on a set of ZIP Codes is useful for businesses that only service certain geographic areas, like your favorite local pizza shop, insurance providers that service select counties, or companies selling products that can only ship to certain states, such as alcohol.

Another way to improve the user experience is by limiting the displayed results to only a certain number of secondary addresses. This is helpful for users living in large apartment or condominium complexes.

You can also turn off the location feature. If you're setting up address autocomplete for forms used by a call center servicing customers nationwide, there's no need to limit results based on ZIP Codes, cities, or states.

Test & Optimize

Continuously test and optimize your address autocomplete feature to ensure it's user-friendly, accurate, and reliable. This is especially important if your developer has made any of the above customizations to the API. You want to be sure everything is working as expected and providing the best user experience.

ONLY USE THE MOST ACCURATE RESULTS

Many geocoding providers will return the results with data about what level of precision the results are verified to—meaning rooftop, parcel, thoroughfare, locality, or administrative area. If you're using a geocoding service that displays the level of accuracy, you can choose to omit less precise results.

Our recommendation? Only accept rooftop or parcel-level results.

CAREFULLY CONSIDER AUTO-FILLING THE ADDRESS VERSUS SUGGESTING OPTIONS

Zero keystroke autocomplete comes in two flavors: you can automatically fill the form fields based on latitude and longitude coordinates, or you can suggest a handful of addresses for the user to select from.

At first glance, auto-filling seems faster and, therefore, better. But what if things don't go according to plan?

Consider this real-world autofill example:

When you're adding an address in a popular online retailer, there's a callout box that says "Save time. Autofill your current location." So you allow the site to use your location to automatically insert the individual address fields of where it thinks you are.

That's great... IF the site gets it right. If it guesses the wrong location—maybe their reverse geocoder misidentified your home as your backyard neighbor who lives on another street—now you need to click into each field and delete the incorrect info. This also requires you to be paying enough attention to notice a small error in the house number.

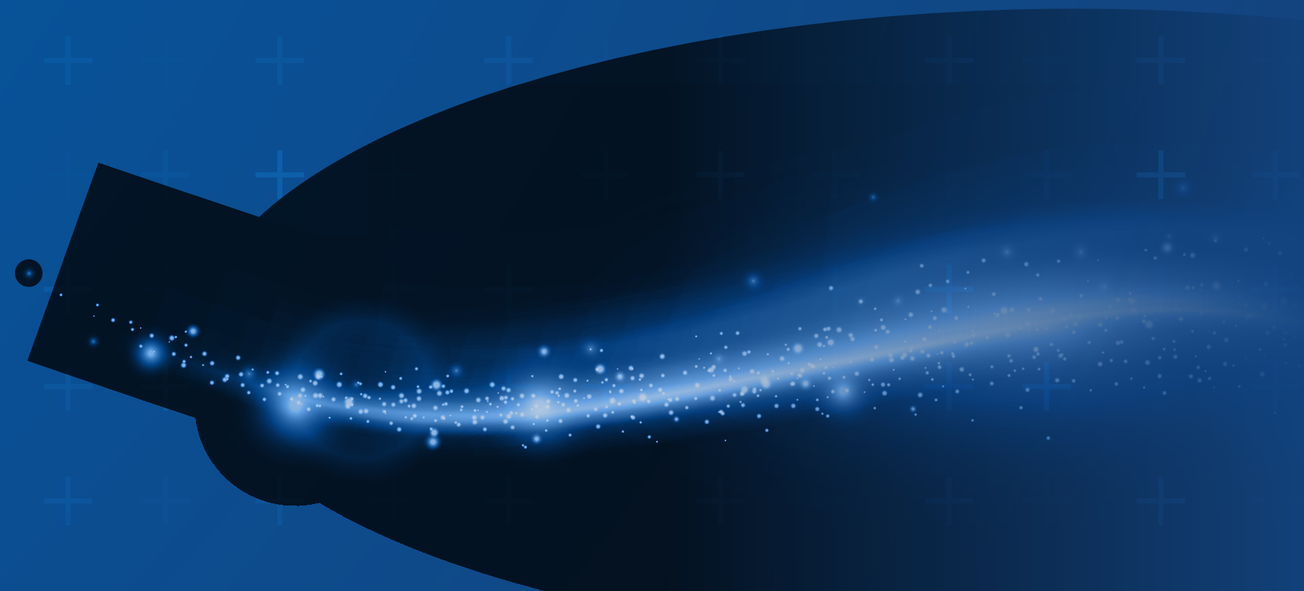
Remember, the goal of autocomplete is to make life easier without the risk of making it far worse.

Instead of auto-filling, you can offer the closest or best address suggestions in a dropdown for the user to select from or ignore, depending on their needs.

Remember, giving your user too many addresses to sift through is just as bad as auto-filling the wrong address.

Our recommendation? Limit your address suggestions to 10 or fewer. Displaying a list of the 10 closest delivery points sorted by distance improves address entry without sacrificing quality.

Implementation Tips for Developers



FORM FLEXIBILITY

This reverse geocoding strategy works for any form type, whether it's a single text area or individual form fields for each address component. If your website has a standard five-field form, you can simply enable the Zero Keystroke Autocomplete API on the first form field.

HAVE A BACKUP PLAN

Google and Apple both allow their mobile customers to choose between sharing "Approximate" or "Precise" location—and to choose which apps get which level of accuracy.

"Precise" location uses a phone's GPS to determine the user's exact location, potentially down to the meter. "Approximate" location uses Wi-Fi and cellular data to locate the device within about 1.2 square miles.

Approximate location isn't sufficient for reverse geocoding, and suggesting 10 addresses that are miles away from the user will only confuse.

It's best to code the integration to skip reverse geocoded address predictions if the location isn't precise enough and to continue straight to regular autocomplete.

How do you know if the location isn't precise enough? Look at the horizontal accuracy value provided by the location provider.

This value indicates a circle's radius that encompasses the device's true location with a certain level of confidence. Android's documentation states a 68% level of confidence for horizontal accuracy. So if your user is rocking a Pixel 7 Pro and it reports a horizontal accuracy of 10 meters, it means that the device's true location is within a circle of 10 meters radius with 68% confidence.

If the horizontal accuracy is low, you'll want to use regular autocomplete. If the horizontal accuracy is high, you can use reverse geocoding.

For details on accessing and using location data for different device types, you can review these docs for implementation guidance for web browsers, iOS, and Android devices.

Conclusion

At Smarty, we believe the goal is for address autocomplete to be useful without getting in the way of address entry. We encourage you to think through these best practices we've shared, and choose the right method for your users.

Implementing autocomplete and optimizing it to cater to how your users engage with your brand will pay big dividends, which come in the form of increased conversions, reduced checkout abandonment, and happier customers who are still left in awe by your silky smooth checkout flow.

Contact us to learn how to get started. There's a whole team of location experts, developers, and customer support representatives waiting to help transform your online forms!

Sources

1. https://www.grammarly.com/blog/mobile-communication-study/
2. https://techjury.net/blog/mobile-vs-desktop-usage/#gref
3. https://www.comscore.com/Insights/Presentations-and-Whitepapers/2017/Mobiles-Hierarchy-of-Needs
4. https://clutch.co/web-designers/resources/how-ux-principles-improve-web-form-design
5. https://www.zippia.com/advice/website-statistics/

smarty