PRD: Similar Addresses Flagging

TL;DR:

Instantly highlight and inform users of similar addresses, making it easy to choose the correct destination.

Team: MYM Routing Team
Contributors: [PM Christof Gernhardt], [Designer], [Engineer],[Engineer], [Analyst]
Resources: [Designs], [Analytics]
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Problem Statement

What product problem are we trying to solve?

Duplicate or similar address names, such as identical street names within close proximity, lead to navigation errors and delays. These issues disrupt journeys, waste time, and reduce user confidence in our navigation system.

User Pain Points:

Users struggle to differentiate between identical street names, causing delays and frustration.

User Testimonials:

"It is frustrating when friends are calling and wondering where to ring, and it turns out they are 6 km away in a different borough."

"I can't afford to waste time guessing which Maximilianstraße the delivery is for."

"It's frustrating to think I'm heading to the right place, only to end up across town."
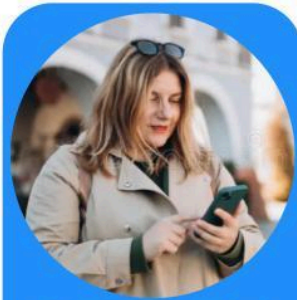
Product Audience

Who is our product solution aimed at?

The "Flagging Similar Addresses" feature is designed for MYM iOS mobile app users who rely on accurate navigation. Key user segments include:

- Delivery drivers and service professionals.
- Users attending events or family functions.
- Frequent travelers exploring new locations.

User Personas

LAURA FISCHER

ABOUT

Laura is a 34-year-old teacher in Berlin who balances a busy schedule with family life. She relies on navigation tools for commuting, field trips, family outings, and errands.

GOALS & NEEDS

- Organize engaging family activities.
- Provide positive learning experiences for herself and her students.

EVERYDAY ACTIVITIES

- Teaching classes and managing a packed schedule.
- Exploring local parks and restaurants with her family.

MOTIVATIONS

- Watching her children and students grow and develop.
- Spending quality time with her husband.
- Enjoying moments with family and friends.

FRUSTRATIONS

- Limited free time due to a packed schedule.
- Exhaustion from managing busy, demanding days.

DEVICE & INTERNET USAGE

Desktop
Mobile
Social Media
Tech Know-how

"It is frustrating when friends are calling and wondering where to ring, and it turns out they are 6 km away in a different borough."

"I need maps to give clearer highlights to the risk of being navigated to a different borough!"

AGE	34
JOB	School Teacher
STATUS	Married, one child
ETHNICITY	Caucasian
LOCATION	Berlin

MAX SCHNELLER

ABOUT

Max is a 32-year-old food delivery driver in Berlin, balancing long working hours with family responsibilities. Duplicate street names often cause delays, impacting his performance and schedule.

GOALS & NEEDS

- Complete deliveries efficiently without navigation delays.
- Maintain high success rates to achieve performance goals.
- Avoiding wasted time and fuel caused by misrouted trips.

EVERYDAY ACTIVITIES

- Waking up early, driving the kids to school.
- Checking in at work, picking up his first deliveries, and planning optimal routes.

MOTIVATIONS

- Support his family and provide for their needs.
- Maximizing daily successful deliveries to qualify for bonuses, potentially getting promoted.

FRUSTRATIONS

- An already hectic and stressful workday becomes worse when misrouted to the wrong borough, costing him time, money (gasoline), and potential bonuses.

DEVICE & INTERNET USAGE

Desktop
Mobile
Social Media
Tech Know-how

"I can't afford to waste time guessing which Maximilianstrasse the delivery is for."

"A navigation app that flags duplicate streets in Berlin would save me so much hassle."

AGE	32
JOB	Delivery Driver
STATUS	Married, two child
ETHNICITY	Turkish-German
LOCATION	Berlin

JAMES CARTER

ABOUT

James is a 29-year-old software developer who recently moved to Harrisburg, Pennsylvania. As a newcomer, he relies heavily on navigation apps to explore the city, commute to work, attend social events, and discover new restaurants.

GOALS & NEEDS

- Quickly adapt to his new city.
- Achieve professional success in his new role.
- Build a social network and make new friends.

EVERYDAY ACTIVITIES

- Commuting to work in a hybrid setup.
- Working out at the gym.
- Participating in after-work social activities with coworkers.

"It's frustrating to think I'm heading to the right place, only to end up across town."

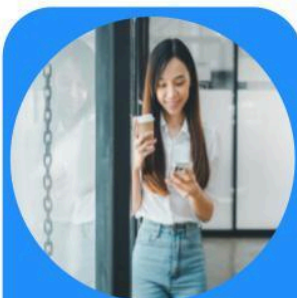|	
AGE	29
JOB	Developer
STATUS	Single
ETHNICITY	African-American
LOCATION	Harrisburg, PA

MOTIVATIONS

- Contributing to impactful projects.
- Aspires to start a family in the future.
- Exploring where to settle long-term.

FRUSTRATIONS

- Occasionally feels lonely.
- Faces challenges starting from scratch in a new city.

DEVICE & INTERNET USAGE

Desktop
Mobile
Social Media
Tech Know-how

EMILY CHEN

ABOUT

Emily is a 21-year-old influencer on her first vacation in Europe. She plans to spend 5 nights in Paris before flying to Venice for a 3-night stay.

GOALS & NEEDS

- Navigate new cities efficiently without getting lost.
- Accurately locate tourist attractions, restaurants, and accommodations.
- Grow her follower base by 20%.

EVERYDAY ACTIVITIES

- Plan walking tours of landmarks and neighborhoods.
- Discover restaurants and shops in real time.
- Share travel experiences on social media.

"I don't want to waste my time in Paris figuring out which Avenue Victor Hugo is the right one."

AGE	21
JOB	Influencer
STATUS	Single
ETHNICITY	Chinese
LOCATION	Shanghai visiting Paris and Venice

MOTIVATIONS

- Experience exciting new adventures and share them with her followers.
- Grow her influence and become a top-tier influencer.

FRUSTRATIONS

- Language barriers that complicate confirming address details with locals.
- Losing valuable sightseeing time double-checking routes or fixing navigation errors.

DEVICE & INTERNET USAGE

Desktop
Mobile
Social Media
Tech Know-how

Solution Justification

Why have we chosen this solution?

- **High Usage Context**: 90% of users use our app for "Getting Directions."
- **Key Pain Point**: 22% of users specifically mentioned duplicate street/address issues—the highest percentage alongside incorrect business hours and slower-than-recommended routes.
- **Action Priority Matrix**: This feature is a "low-hanging fruit," requiring moderate effort but promising significant user and business impact.

Secondary research results are underlining the significance of duplicate street names:

- In urban areas like Berlin, Germany, there are numerous duplicate street names: 12 "Waldstraße," 10 "Lindenstraße," and 9 each of "Bahnhofstraße," "Charlottenstraße," and "Parkstraße." This significantly contributes to miss navigation incidents.

All research findings: ⊡ Miro

Proposed Solution: Similar Addresses Flagging

This feature addresses our research findings and introduces a clear and simple user interface that displays flagged suggestions with distinguishing details, such as ZIP codes, boroughs, or landmarks. It aims to reduce user effort in verifying the correct address, minimize navigation errors, and enhance the overall user experience with MYM's navigation tool.

High-Level Approach

How will the feature work?

1. **Detection:** When users input an address, the MYM app will detect potential conflicts, such as identical street names within a set radius.
2. **Flagging:** Display flagged options with distinguishing details, such as:
   - ZIP codes.
   - Boroughs.
   - Landmarks.
3. **Guidance:** Guide users to select the correct address to minimize errors.
4. **Feedback Loop:** Allow users to report incorrect flags to improve system accuracy.

Key Benefits:

- Reduce navigation errors.
- Save time for users.
- Enhance user confidence in MYM app's navigation tool.

Objectives and Measures of Progress

How will we measure progress toward achieving your solution?

Objective 1: Enhance Navigation Accuracy

- **Key Result 1:** Reduce address-related navigation complaints by 30% within three months post-launch.
- **Key Result 2:** Achieve a 15% increase in positive user feedback on navigation features (via app ratings and surveys).
- KPI

Objective 2: Improve User Engagement

- **Key Result 3:** Increase the number of users utilizing the address differentiation feature by 20% within the first quarter post-launch.
- **Key Result 4:** Survey users who have used address differentiation. At least 90% of users who encounter flagged addresses should select the correct option.

Progress Tracking

- Collect analytics on flagged address usage and resolution rates.
- Monitor customer support logs for complaint trends.
- Conduct user feedback surveys pre- and post-feature launch.

KPI 1: Percentage of users actively using the address differentiation feature weekly.

KPI 2: Increase in total feature usage sessions within the first quarter.

KPI 3: Number of flagged address cases logged and resolved per week.

KPI 4: Trends in customer support complaints specifically tied to navigation duplicate / similar address. Percentage reduction in duplicate / similar address navigation complaints over three months post-launch.

Risks and Mitigations

Potential Risks:

1. **False Positives:** Flagging addresses unnecessarily.
   - *Mitigation:* Refine detection logic and test extensively with real-world data.
2. **User Confusion:** Overwhelming users with too many flagged options.
   - *Mitigation:* Limit flags to the most relevant conflicts and provide clear UI guidance

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Initiatives, Epics, and User Stories

Initiative: Improve contributor features for MakeYourMaps		
Details: Navigation & Route Optimization Features of MYM iOS App Enhance the core navigation experience of the MakeYourMaps platform by addressing critical user pain points, improving address accuracy, and ensuring navigation reliability.		
Epic 1: [Similar Address Flagging and User Guidance] **Objective:** Resolve address ambiguities and improve user navigation confidence by detecting and resolving conflicting or duplicate addresses.	**Epic 2: [Usability & Accuracy Feedback]** **Objective:** Provide users with a seamless way to give feedback on the "Similar Address Flagging" feature, ensuring continuous improvements.	**Epic 3: [User Education for Similar Address Flagging]** **Objective:** Ensure users understand and can effectively utilize the "Similar Address Flagging" feature by providing a comprehensive and quick tutorial.
User Story #1: Detection **As a user**, **I want** the app to automatically detect potential address conflicts when I input an address, **so that I** am aware of duplicate or similar locations in advance. **Acceptance Criteria:** 1. Automatically identify conflicting addresses within a predefined radius. 2. Allow users to adjust the radius for conflict detection (e.g., 5 km to 100 km). 3. Notify users of duplicate or similar addresses within 2 seconds after input. **Subtasks:** 1. Develop an algorithm to detect conflicting or duplicate addresses within the user-defined radius.	**User Story #1: Feedback Submission** **As a user**, **I want** to easily submit feedback on the "Similar Address Flagging" feature, **so that I** can help improve its functionality. **Acceptance Criteria:** 1. Include a "Give Feedback" option directly within the "Similar Address Flagging" interface. 2. Allow users to rate their experience (e.g., 1-5 stars). 3. Provide an optional text field for detailed feedback. **Subtasks:** 1. Add a "Give Feedback" button to the "Similar Address Flagging" interface. 2. Design a simple rating system (e.g., 1–5 stars).	**User Story #1: Onboarding Tutorial** **As a first-time user**, **I want** an optional interactive tutorial to guide me through the "Similar Address Flagging" feature, **so that I** can quickly learn how to use it effectively.. **Acceptance Criteria:** 1. Display an interactive onboarding tutorial when the feature is accessed for the first time. 2. Include step-by-step guidance covering detection, flagging, and selecting flagged addresses. 3. Allow users to skip or revisit the tutorial from the settings menu. **Subtasks:** 1. Design the Tutorial Flow 2. Create a First-Time Access Trigger

2. Implement a radius adjustment slider for users. 3. Test detection accuracy with edge cases, such as non-standardized address formats.	3. Integrate a text box for optional user comments. 4. Test and Validate	3. Integrate Skip and Replay Options 4. Test and Validate

User Story #2: Flagging
 	
As a user, I want the app to clearly display possible duplicate street names and their locations **so that I** can make an informed decision.
 	
Acceptance Criteria:
1. Highlight how many streets with the same name were found within a 20 km radius.
2. Use color-coded and font heaviness proximity indicators for clarity:
    ○ Light blue: 20 km   Light
    ○ Light green: 10 km Normal
    ○ Orange: 7 km
 	
        Medium
    ○ Red: 5 km
 	
        Bold
3. Display borough and ZIP code for each flagged address.
4. Enable filtering flagged addresses by borough, ZIP code, or proximity.
5. List flagged addresses in order of proximity (closest to furthest).
 	
Subtasks:
1. Design a UI for displaying flagged
	User Story #2: Feedback Categories
	
	As a user, **I want** predefined categories to structure my feedback, **so that I** can focus on specific areas of improvement.
	
	Acceptance Criteria:
	1. Predefined feedback categories, with as:
	    ○ Accuracy of Flagging
	    ○ Ease of Use
	    ○ Clarity of Details Displayed
	    ○ Suggestions for Improvement
	
	Subtasks:
	1. Build predefined feedback categories in a selection menu.
	2. Allow users to select multiple categories for their feedback.
	3. Test and Validate	

addresses with proximity indicators (color-coded and font-weighted). 2. Integrate filtering options by borough, ZIP code, and proximity. 3. Develop logic to dynamically order flagged addresses by distance. 4. Perform testing to ensure clarity and ease of navigation with flagged options.		
User Story #3: Guidance **As a user**, **I want** the app to guide me in selecting the correct address from flagged options, **so that I** can minimize errors and avoid delays. **Acceptance Criteria:** 1. Provide a clear call-to-action: "Which Address Are You Going To?" 2. Highlight the most likely correct option based on proximity, user preferences, or historical data. 3. If the user is unsure, ask them to select a borough or ZIP code. 4. Include visual aids, such as landmarks and map previews, for flagged options. **Subtasks:** 1. Implement a "Which Address Are You Going To?" call-to-action button. 2. Create a recommendation engine using historical user data	**User Story #3: User Confirmation** **As a user**, **I want** confirmation that my feedback has been received, **so that I** know my input is valued. **Acceptance Criteria:** 1. Display a confirmation message after feedback submission: "Thank you for your feedback! Your input helps us improve." **Subtasks:** 1. Create and display a confirmation message ("Thank you for your feedback!") after submission. 2. Add a feedback ID reference in the confirmation message for tracking purposes. 3. Test and Validate	

and proximity for highlighting the most likely correct address. 3. Add borough/ZIP code selection options for uncertain users. 4. Include interactive visual aids, such as map previews and prominent landmarks, for each flagged address. 5. Test and Validate		
	User Story #4: Feedback Visibility **As a user**, **I want** to view my previously submitted feedback, **so that** I can track my input over time. **Acceptance Criteria:** 1. Include a "Feedback History" section where users can view past submissions. **Subtasks:** 1. Create a "Feedback History" section within the app. 2. Allow users to view submitted feedback along with timestamps. 3. Develop a filter option for sorting feedback by category or date. 4. Test and Validate	
	User Story #5: Feedback Insights **As a user**, **I want** to include hashtags indicating my role (e.g., #deliveryprofessional, #local, #traveler),	

	so that my feedback is relevant to my use case.
	
	Acceptance Criteria:
	   1. Offer optional hashtags for users to specify their role.
	
	Subtasks:
	   1. Enable users to tag their feedback with use case-specific hashtags (e.g., #deliveryprofessional).
	   2. Create a selection menu for suggested hashtags, relevant to the user base.
	   3. Ensure tags are stored in a searchable database for later analysis.
	   4. Test and Validate	

	User Story #6: System Response to Feedback
	
	As a user,
	I want to know when my feedback results in system improvements,
	so that I feel my input makes a difference.
	
	Acceptance Criteria:
	   1. Notify users when updates or enhancements are implemented based on their feedback with a message like: "Based on user feedback, we've enhanced the 'Similar Address Flagging' feature."
	
	Subtasks:
	   1. Notify users via push notifications or in-app messages about feature	

	updates tied to their feedback. 2. Add a "Feedback Impact" section that summarizes how user feedback has influenced changes. 3. Test and Validate	

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