# Analyze potential scenarios to uncover non-functional requirements and constraints. Document scenario-based requirements.

Scenario 1: High User Traffic

**Description:** During peak hours or events, such as community gatherings or local festivals, a significant increase in user traffic is expected within the Community Forum Application.

Non-Functional Requirement:

**Performance:** The system should be capable of handling a high volume of concurrent users without experiencing degradation in response time or system downtime.

Constraint:

**Scalability:** The system must scale horizontally or vertically to accommodate increasing user loads during peak hours or special events.

Scenario 2: Data Privacy and Security

**Description:** Users share personal information and engage in conversations within the Community Forum Application, making it necessary to implement stringent measures to protect their privacy and ensure data security.

Non-Functional Requirement:

**Security:** The system must implement robust authentication, authorization, and encryption mechanisms to safeguard user data and prevent unauthorized access or data breaches.

Constraint:

**Compliance:** The system must comply with relevant data protection regulations, such as GDPR or CCPA, regarding the collection, storage, and processing of user data.

Scenario 3: Accessibility

**Description:** Users with disabilities or impairments may use assistive technologies to access and interact with the Community Forum Application, requiring adherence to accessibility standards.

Non-Functional Requirement:

**Accessibility:** The system interface and content must conform to accessibility guidelines, such as WCAG 2.0 or Section 508, to ensure equitable access for users with disabilities.

Constraint:

**Compatibility:** The system must be compatible with various assistive technologies, including screen readers, voice recognition software, and keyboard navigation, to facilitate accessibility for users with diverse needs.

Scenario 4: Geographic Localization

**Description:** The Community Forum Application serves users across different regions or countries, requiring support for multiple languages and localization features.

Non-Functional Requirement:

**Localization:** The system must support localization features, including multi-language support, date/time formatting based on user locale, and cultural adaptations, to cater to diverse user populations.

Constraint:

**Resource Constraints:** The system's localization features should be implemented efficiently to minimize resource consumption and ensure optimal performance across different regions or countries.

Scenario 5: Platform Compatibility

**Description:** Users access the Community Forum Application from various devices and platforms, including smartphones, tablets, and web browsers, requiring cross-platform compatibility.

Non-Functional Requirement:

**Compatibility:** The system must be compatible with various devices, operating systems, and web browsers, ensuring consistent functionality and user experience across different platforms.

Constraint:

**Resource Allocation:** The system development and testing efforts should allocate resources effectively to ensure compatibility with target platforms while maintaining development timelines and budget constraints.

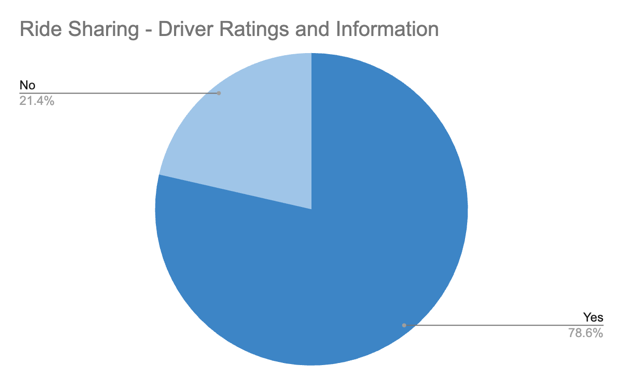
| Feature |  | Yes | No |
| --- | --- | --- | --- |
| Profile Page | 14 | 50 % | 42% |
| Customize Board by Location | 14 | 70 % | 30 % |
| Social media | 14 | 62% | 38 % |
| Ride Share -Ratings |  | 78% |  |
| Moderation System | 13 | 90% |  |
| Sign In Features Easy to use | 5 | 35% |  |
| Sign In- Face ID | 2 | 2 14% |  |
| Sign In | 2 | 14% |  |
| Sign In- Two Factor | 4 | 29% |  |
| Sign In- Google Sign In | 2 | 14 % |  |
| Create New Category |  | 55% | 30% |
| See who Is online |  |  | 64% |
| News Feed | 14 | 50 % | 50 % |
| Marketplace | 14 |  |  |
| Marketplace – clutter |  |  | 21% |
| Marketplace – Enhance |  | 14% |  |
| Marketplace |  | 35.7% | 21.4 |
| Marketplace separate feed |  | 7.1 % |  |
| Upload Images | 13 | 86% | 14% |
| See Owners of post | 7 | 50% |  |
| Forward Post | 14 | 57% | 14% |
| Time Date Location | 14 | 86.7% | 6.7 |
| Date Location only |  |  | 6.7 |
| Security | 14 | 92.8% | 7.1 |
| Private Message | 14 | 85% |  |
| Location |  | 50% | 50% |
| Categorize post by location | 14 | 10% | 90% |
| Search Function | 14 | 90% | 10% |
| Chat to drivers | 14 | 78% |  |
| History Page |  |  |  |

A blue circle with yellow and grey circles

Description automatically generated with medium confidence A blue pie chart with text

Description automatically generated A blue pie chart with text

Description automatically generated A blue pie chart with text

Description automatically generated  A graph with blue bars

Description automatically generated with medium confidence

A graph of a sign in features

Description automatically generated A graph with yellow lines

Description automatically generated with medium confidence A blue pie chart with white text

Description automatically generated A blue circle with two white circles

Description automatically generated A graph with yellow bars

Description automatically generated A graph with blue rectangles

Description automatically generated A bar graph with text

Description automatically generated A bar graph with blue bars

Description automatically generated A graph of blue rectangular bars

Description automatically generated

A blue circle with a yellow triangle and red triangle

Description automatically generated A blue pie chart with a few white text

Description automatically generated A blue circle with a white triangle

Description automatically generated

A graph with yellow bars

Description automatically generated A graph with a number of columns

Description automatically generated with medium confidence A bar graph with blue bars

Description automatically generated A graph with blue bars

Description automatically generated A graph with text overlay

Description automatically generated A diagram of a pie chart

Description automatically generated

A bar graph with text

Description automatically generated