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# Introduction

## Purpose

The purpose of this document is to collect, analyze, and define high-level needs and features of Uber. It focuses on the capabilities needed by the stakeholders and the target users, and why these needs exist. The details of how Uber fulfills these needs are detailed in the use-case and supplementary specifications.

The introduction of the Vision document provides an overview of the entire document. It includes the purpose, scope, definitions, acronyms, abbreviations, references, and overview of this Vision document.

## Scope

The scope of this vision document is to provide a platform for users to find steady work and flexible hours driving for Uber. Uber drivers will have improved features to work with and get to choose hours throughout the week using scheduling software built into the Uber app. Uber riders can find reliable drivers at any hot hours of the day and reliable options such as UberX and UberXL to fit their needs.

## Definitions, Acronyms, and Abbreviations

Driver: Uber driver of the vehicle

ETA: estimated time of arrival

Schedule: Drivers can choose which to time block to start working

UberX: comfortable and affordable option with standard sedans

UberXL: Larger vehicles for groups (SUVs and minivans)

Uber Black: Premium service with luxury vehicles

Uber Comfort: cars with more comfortability (higher price than uber x)

## References

N/A

## Analyst Certifications

We, Nanda Rajaraman, Tawfeeq Mohamed, Abdoulaye Diallo, have analyzed these documents and believe that they:

* Comply with current UML syntax and best practices.
* Are internally consistent
* Meet the stakeholder needs, as we understand them

## Overview

This document contains the following sections: positioning, stakeholder and user descriptions, product overview, goal model, constraints, precedence and priority, use-case model, object model, and stakeholder requests.

# Positioning

## Business Opportunity

The business opportunity being met by this project is to enter the ride service market to provide a platform that is more user friendly and flexible to attract more drivers and riders.

## Problem Statement

|  |  |
| --- | --- |
| The problem of | **limited scheduling flexibility for drivers** |
| affects | **drivers seeking control over their work hours** |
| the impact of which is | **lower satisfaction and reduced peak availability** |
| a successful solution would be | **a platform offering flexible work**. |

## Product Position Statement

|  |  |
| --- | --- |
| For | drivers |
| Who | Need steady work and hours |
| The (Uber platform) | is a ride-sharing service |
| That | Connects riders with drivers swiftly and effectively and work with scheduling freedom |
| Unlike | Traditional taxis and public transportation |
| Our product | offers reliable, affordable, and fast service to anyone, anywhere |

# Stakeholder and User Descriptions

## Stakeholder Summary

[There are a number of stakeholders with an interest in the development and not all of them are end users. Present a summary list of these non-user stakeholders. (The users are summarized in section 3.3.)]

|  |  |  |
| --- | --- | --- |
| **Name** | **Description** | **Responsibilities** |
| Customers  Drivers  Investors  Regulators and Government | The people that order the rides from their devices. Users look for affordability, quality, safety, and reliability.  Independant contractors using Uber to provide a service  Entities that help to provide a financial resource to Uber’s growing platform.  Authorities that help ensure the legality and safety that Uber must provide to all involved. | Customers must ensure that the system provides an affordable ride that they can provide feedback on. They use the app directly to book and rate rides.  Ensure the vehicles are up to date and that pick up and drop off times are accurate.  Maintain the financial viability of the company while also monitoring vitals such as market demand, investment return, or even platform improvement.  Certify that Uber is complying with all local, state, and national safety regulations. |

## User Summary

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Description** | **Responsibilities** | **Stakeholder** |
| Customers  Drivers | The people that order the rides from their devices. Users look for affordability, quality, safety, and reliability.  Independant contractors that help transport customers from point A to point B. | Ensure that all rules are followed according to Uber’s Terms and Services. Identify and confirm that rider is matched with user on app.  Choose the hours that they would like to work through pre-determined scheduled hours. They also must follow Uber’s guidelines for service. | Rely on Uber for efficient transportation and a safe ride.  Depend on uber as a stable & Flexible form of income. |

## User Environment [Optional]

## Key Stakeholder or User Needs [Optional]

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Need** | **Priority** | **Concerns** | **Current Solution** | **Proposed Solutions** | |
| Broadcast messages |  |  |  | |  |

# Product Overview

Uber is a mobile application for people to request rides and get to a destination as soon as possible. Uber has many different vehicle options that pertain to different users. It also provides drivers with features such as work scheduling to ensure they have a steady job at the time of need. It is usable by anyone with a basic grasp on smartphone and computer capabilities.

• The application encourages riders to request rides confidently and drivers to work frequently

• The application shows the user a choice of different options such as UberX, UberXL, and Uber Black, each having its own benefits

• The application provides the Uber driver with a scheduling service to book hours throughout the week and ensure that the driver can work a flexible schedule that suits their needs

## Context Diagram

DRIVER

RIDER

UBER APP

## 4.2 Assumptions and Dependencies

* Users must have the ability to navigate the application or website
* The application must provide the rider with a driver at their request
* The different classes of Uber must be available
* The application must be running for Drivers to schedule work for later in the week
* Drivers will complete the ride efficiently and drop off the rider feeling safe and satisfied

## Licensing and Installation [Optional]

[Licensing and installation issues can also directly impact the development effort. For example, the need to support serializing, password security or network licensing will create additional requirements of the system that must be considered in the development effort.

Installation requirements may also affect coding or create the need for separate installation software.]

# Requirements Model

## 5.1 WHEN a user requests a ride, THEN match the user with an available driver offering the selected service type (UberX, UberXL, or Uber Black) within 2 minutes.

## 5.2 WHEN a driver schedules a work shift using the built-in scheduling software, THEN ensure the system confirms their time block availability within 1 minute.

## 5.3 WHILE a driver’s schedule is in an unavailable time block, THEN NOT allow them to go online to accept rides.

## 5.4 WHILE a rider is selecting a vehicle option, THEN NOT allow the system to match them with an unavailable vehicle type (e.g., UberX when only UberXL is available).

## 5.4 WHILE a driver is scheduled to work, THEN always provide them with available ride requests during high-demand hours (hot hours of the day).

## 5.5 WHILE a rider is in an active trip, THEN always display ETA and trip progress in real-time.

## 5.6 WHEN a driver’s scheduled shift ends, THEN stop matching them with new ride requests and log them out automatically.

## 5.7 WHEN a rider cancels a ride before pickup, THEN cease the driver assignment within 30 seconds and notify the driver.

## 5.8 G1: Provide flexible scheduling tools for drivers.

## - G1.1: Ensure drivers can select and adjust their time blocks for the week.

## 5.9 G2: Offer vehicle options that fit different user needs.

## - G2.1: Provide UberX for affordable rides, UberXL for larger groups, and Uber Black for premium services.

## EARS Ubiquitous

## 5.10 The system shall display available vehicle types (UberX, UberXL, Uber Black, Uber Comfort) based on the user's request and location.

## 5.11 The system shall notify drivers of upcoming shifts they have scheduled within the next hour.

## EARS Event-driven:

## 5.12 WHEN a driver goes online during a scheduled shift, THEN the system shall notify them of available ride requests in their area.

## 5.13 WHEN a rider selects UberXL, THEN the system shall ensure only larger vehicles are considered for the match.

## EARS Unwanted:

## 5.14 IF a driver’s scheduled shift ends, THEN the system shall log them out if they do not have an active trip.

## 5.15 IF no available drivers match the user’s requested vehicle type, THEN the system shall notify the user and suggest an alternative (e.g., switch from Uber Black to UberX).

## EARS State-driven:

## 5.16 WHILE the driver is logged in during a scheduled shift, the system shall prioritize matching them with ride requests.

## 5.17 WHILE a rider is in the trip confirmation screen, the system shall display available vehicle options based on current driver availability.

## EARS Optional:

## 5.18 WHERE the scheduling feature is included, the system shall allow drivers to block time slots to suit their availability.

## 5.19 WHERE Uber Comfort is selected, the system shall offer users higher comfort vehicles with amenities like extra legroom.

## User Story Requirement:

## 5.20 As a driver, I want to schedule my work hours so I can have flexibility throughout the week.

## 5.21 As a rider, I want to choose from various vehicle options (UberX, UberXL, Uber Black) so I can select the most appropriate ride for my needs.

# Constraints [Optional]

# Precedence and Priority

# Use-Case Model

[Place your use-case model here. You can use the RUP template for use-case documentation; however, once completed, they should be copied into this consolidated document.]

## Goal Use-Case Traceability

## Use-Case Diagram

## Business Process Model

[Each use-case is represented by a BPM task, in one or more BPMs]

## Use-Case <1: Verb-noun name> [priority]

## Use-Case <2: Verb-noun name> [priority]

## Use-Case <etc> [priority]

# Object Model

[Place your class model here. As an alternative, you may include portions of your class model within its associated use-case’s section.]

# Stakeholder Requests [Optional]