PROJECTS

IN-CAR VIRTUAL REALITY

How could **Virtual Reality** be a valuable tool to make the most of your time while **driving** or **travelling** in your vehicle?

COME ON

A prototype of an **interactive multiplayer video game** that offers the player the possibility to meet **compatible people** while **enjoying** their favorite **activities**, providing customized **mobility services**

STORAGE SYSTEM FOR A RV

How should be an innovative **storage system** for a **recreational vehicle** to fulfill the **needs** for the **customer** in a future scenario around **203+**?

RACING GHOST EXPERIENCE

Create a **system prototype** that allows to perform a **racing competition in real time** that **combines real** scale vehicles and **virtual vehicles**

IN-CAR VIRTUAL REALITY

MOTIVATION

People who live and/or work mobile today rely on all kinds of devices to work, get entertained, etc.

It is very likely that this trend will intensify in the future (i.e. Digital nomad lifestyle).

To overcome the constraints of those devices (small screens, limited interactions, etc.) **Virtual reality** can be a valuable tool to make the best use of the time while getting driven or out of free time.

OBJECTIVES

Firstly, a concept for a specific use case, (i.E. Office-work, gaming, infotainment, etc.) In a "travelling" scenario.
Based on this concept the following objectives should be accomplished:

- Interior concept considering the VR affordances and constraitns
- VR scene for in car usage
- Development of devices that enhance the VR experience (i.e. Device for text input in an office concept)

APPROACH

User-centric design approach that considers a persona/personas and derives relevant use-cases.

The team should consider to focus on max. Two objectives, depending on the team-members' strengths.

COME ON
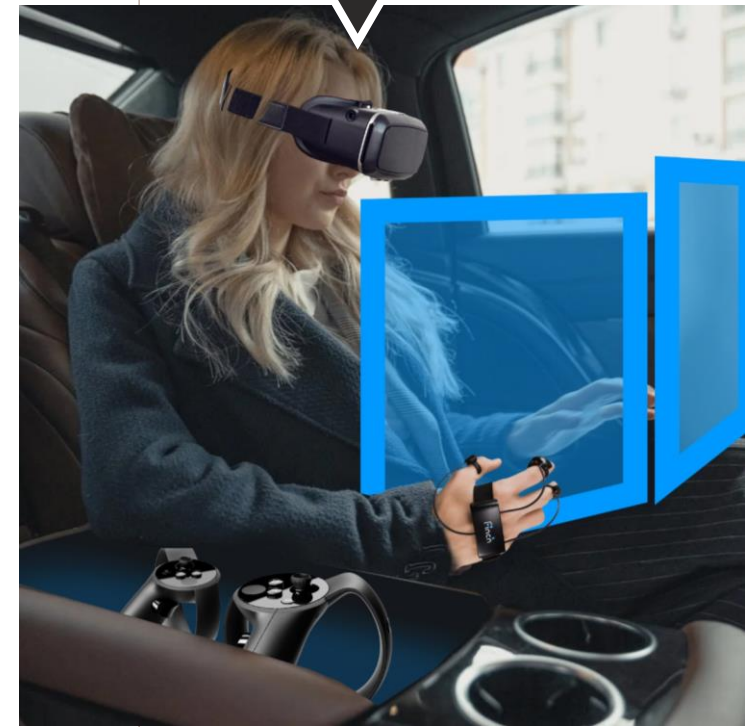
MOTIVATION

This video game invites you to discover new places and activities in big cities like Barcelona, offering you the possibility to meet like minded people like you to enjoy them.

The better the experiences you live, the higher the possibilities to become an influencer!

OBJECTIVES

The aim of this initiative is the creation of a video game that offers the user the possibility to meet compatible people while enjoying their favorite activities, **providing customized mobility services** and letting them feel what it means to become an influencer.

APPROACH

1. Create a prototype of an interactive multiplayer video game:
   - Create the world: an urban, metropolitan and ski area, beach...
   - Avatars can interact, stay and travel to different locations, **using different mobility services**
   - Influencers: who are they? What is their role in the game? How can players become influencers?
   - Activities: travel, try restaurants, sports, concerts, geo catching, ecological activities, ...
   - Mobility: Cars, busses, motorbikes (motorbikes rentals), scooters, boats ...
   - This prototype muss be delivered at the end of the project
2. Create a video spot (trailer) which englobes the concept, aim and use of the video game.

A mobility video game that offers the user the possibility to meet compatible people while enjoying their favorite activities, **providing customized mobility services** and letting them feel what it means to become an influencer.

Innovative storage system for a future recreational vehicle (RV)

MOTIVATION

Trends, drivers and enablers like digitalization, sustainability or autonomous driving functions are changing the future of living, working, travelling and mobility. Boundaries are moving and new possiblities for customers appear.

OBJECTIVES

The aim of this project is to take a look at the future of recreational vehicles (RV). How are the future trends and technologies are changing the way people live, work and travel with their RV.
One important part of these future RV is an innovative storage system, that supports the customer to store his stuff (from the dishes to the working equipment). Your concrete task is to find concepts and solutions for this innovative storage system (s).

APPROACH

Take yourself to the future in the year 203+.
Find the requirements for an innovative storage system.
Create ideas, concepts and solutions for this storage system.
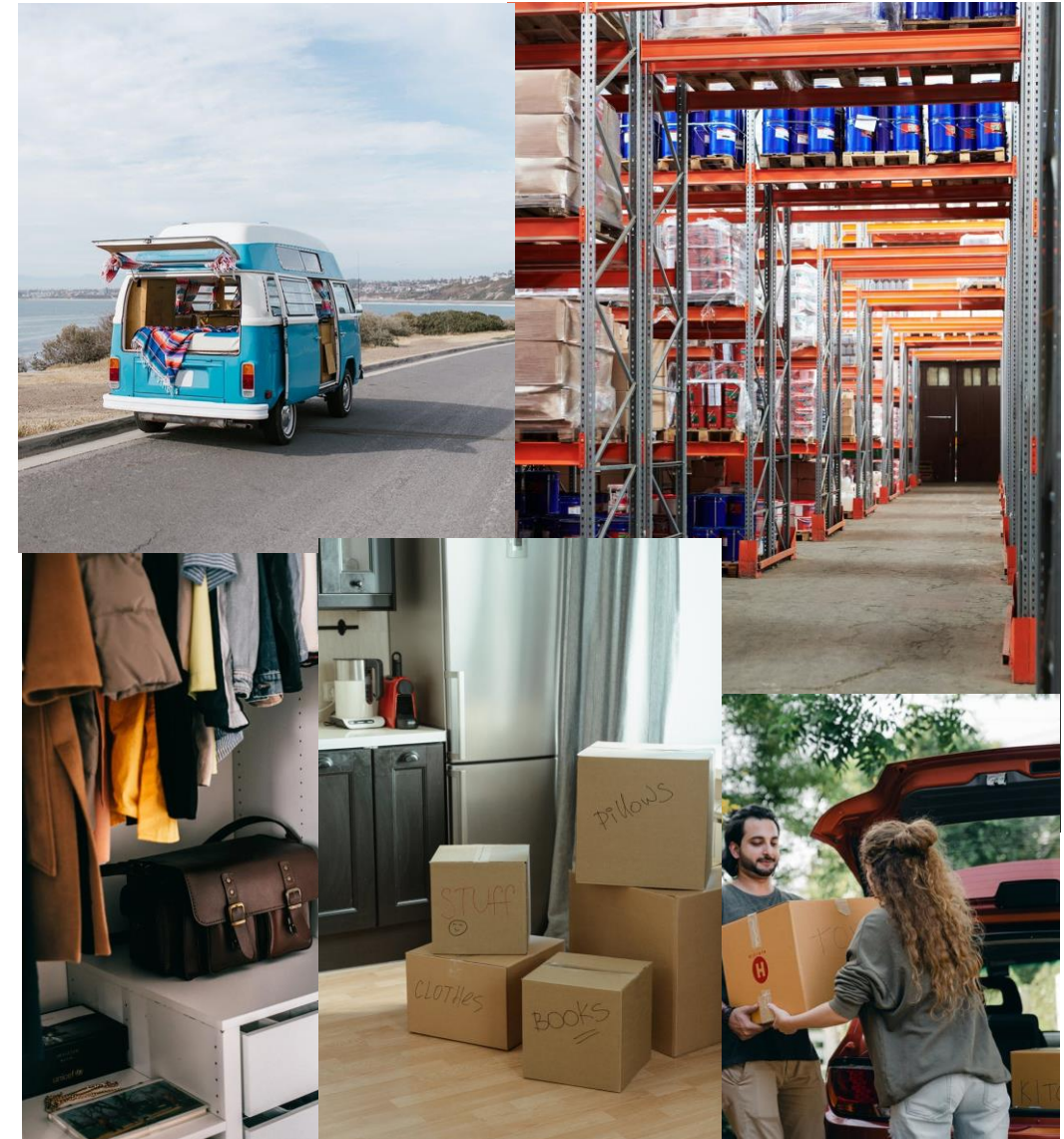
RACING GHOST EXPERIENCE

MOTIVATION

- Interest in video games and virtual reality games is increasing. There are racing simulations, even synchronized with a real race.
- Additionally, there is a tendency for stores to become experimental spaces.

Racing ghost experience is a racing competition in real time that combines real vehicles and virtual vehicles.

This experience is a new way to experience CUPRA and could be offered to customers, both testing CUPRA vehicles at a physical level on a professional circuit and competing virtually in real time.

OBJECTIVES

Perform a racing competition in real time that combines real vehicles and virtual vehicles (real vehicles see virtual vehicles during the race and vice versa).

The experience must be able to be tested from the point of view of the driver of a physical vehicle and also from the perspective of a driver of a virtual vehicle.

Implement the communication and visualization of virtual and real players on their respective screens.

APPROACH

1. Create a system prototype that allows to perform a racing competition in real time that combines real scale vehicles and virtual vehicles.
   - The telemetric data will be measured on a remote-controlled scaled vehicle with instrumentation
   - Integrate real telemetry measurements in the virtual environment.
   - Visualization of the phantom image of the real vehicle for the virtual players.
   - Visualization of the virtual players' images on the real player's screen.
   This prototype must be tested as hardware and software.

2. Create a video to explain the concept using the prototype of the system.

Perform a racing competition in real time that combines real and virtual vehicles during the race.

🏆 Racing competition

🚗 Real vehicles

🎮🚗 Virtual vehicles

⏱️ In real time