

CART - CARry on Tradition

PROJECT DESCRIPTION

CULTURAL HERITAGE: LO SCOPPIO DEL CARRO

UNESCO category: Social practices, rituals and festive events.

Every year in Florence, on Easter Sunday, the traditional "Scoppio del Carro" takes place.

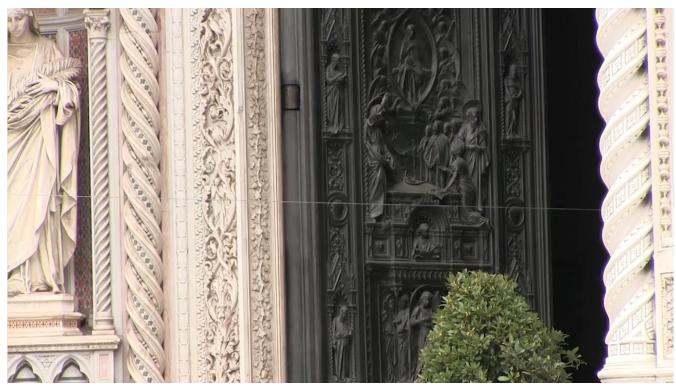
This tradition was born about 350 years ago. The decorated cart, also called "Brindellone", was first created in 1622. In the shape of a tower 2–3 floors

high, it is pulled by two oxen decorated with garlands around the streets of Florence, up to Piazza del Duomo, where it is left in the space between the baptistery and the cathedral.

At the height of the ceremony, the archbishop lights a dove-shaped rocket from the cathedral altar that runs throughout the church's central nave and reaches the cart outside, causing it to burst.

The ancient feast has always attracted tourists, citizens and many farmers from the Florentine countryside, who took the auspices for the harvest from the successful outcome of the "colombina" ride on the rope, which has to take place without obstacles.





- Location: the project consists of a game for smartphones. In order to download the app, the user needs to be connected to the Wi-Fi network in Florence. The users can play while they are in the Piazza del Duomo.
- Project justification: the project could spread the knowledge of this tradition to the numerous tourists and also to the citizens themselves. Thanks to the app, it would be possible to spread more in-depth information on the tradition, ensuring that even Florentine citizens learn new things about their city.

Goals:

- o application development both for iOS and Android system
- o multilanguage application
- o 3D rendering
- o use of augmented reality

- o it can only be used in Piazza Santa Maria del Fiore (Piazza del Duomo), during the Easter period.
- o possession of a smartphone is required

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TARGET USERS

The project wants to involve tourists and Florentine citizens in the knowledge of a very ancient popular tradition.

Since it is a smartphone game, it is mainly addressed to young people and adults.

STAKEHOLDERS

This type of project could be financed by the municipality of Florence, interested in wanting to let as many tourists as possible know this tradition and the Florentine culture (the municipality could take inspiration for other games, also similar to Google's Doodles, to be made available in the periods of festivities like Christmas, the day of the patron Saint John, ...).

DIGITAL **APPLICATIONS**



Runner game

screen

3D rendering



Touch



NARRATIVE FRAMEWORK

During Easter the traditional flight of the "colombina" is celebrated in Florence. A doveshaped rocket starts from the altar of the Santa Maria del Fiore cathedral, crosses the church to the outside, turn on the "brindellone" and goes back to the altar.



The user finds himself driving the dove, with which he faces 3 levels, each of which consists of an obstacle course/flight.



To unlock each level, the player must first move around the Piazza del Duomo in search of a virtual object (augmented reality) visible through his smartphone.



At the end of each level a **curiosity** about tradition is revealed.

Level 1

Level 2

Level 3

Hunting of the object 5 minutes

+

Obstacle course 1 minute

Hunting of the object 5 minutes

+

Obstacle course 1 minute

Hunting of the object

5 minutes

+

Obstacle course 1 minute

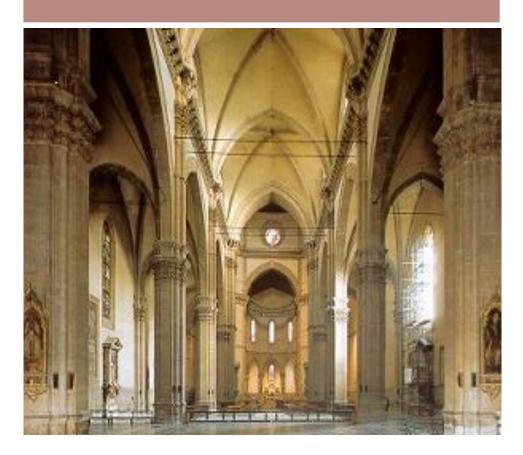
There is not a growing difficulty in the three levels, because the aim of the game is to provide knowledge to everyone.

CONCEPT MM DESIGN

STORYBOARD OF NARRATIVE FRAMEWORK

Level 1: altar → Cart

Level 3: Cart → altar

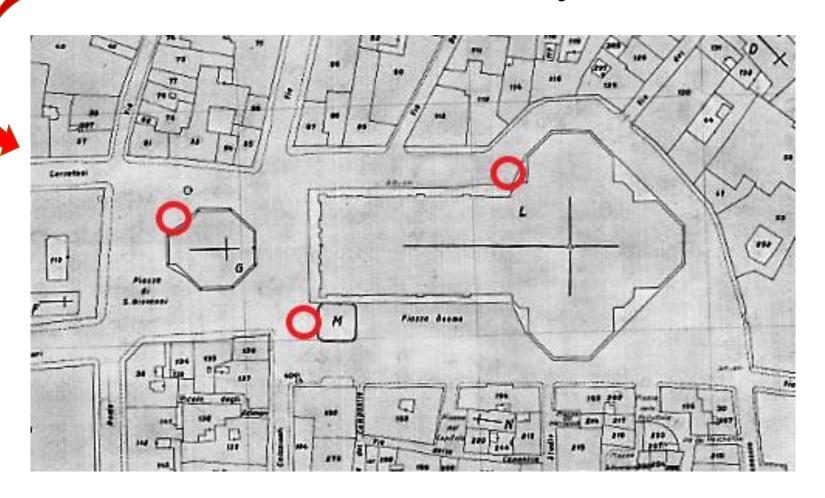


Level 2: around the Cart

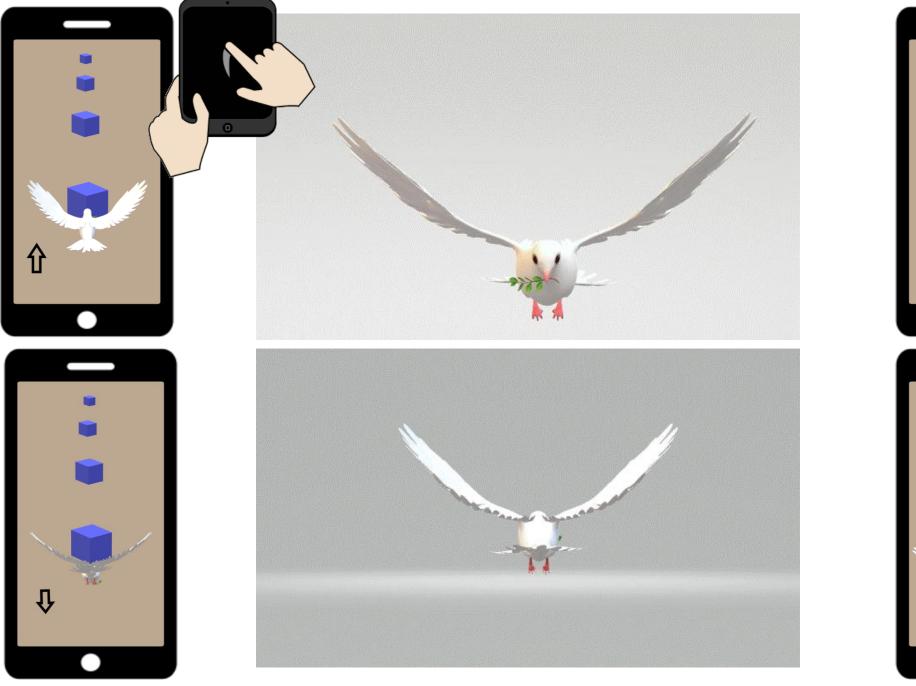


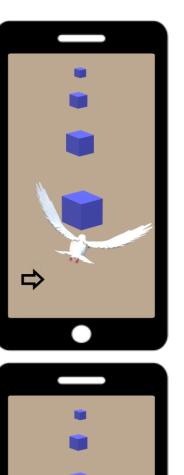
<u>VIEW OF THE VIRTUAL OBJECT</u>

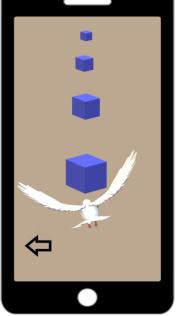
LOCATION OF THE VIRTUAL OBJECTS











Scena 1	Panoramic view of Florence	Song «La porti un bacione a Firenze», instrumental only		
Scena 2	Panoramic view of the interior of the church			
Scene 3	Panoramic view of Piazza del Duomo with «brindellone» and crowd			
Scene 4	Still image of the cathedral + drop down menu + button		Menu to choose the language + button «OK»	
Scene 5	Still image of the cathedral + text		Title «CART» Text «Play and discover some interesting facts on this tradition»	

Scene 6	Still image of the cathedral + text		Text «Follow the red arrow and find the olive branch; frame it and start the game!"	A red arrow appears on the screen of the mobile phone indicating the direction to follow and becomes larger as the user approaches the object.
Scene 7	Still image of the interior of the cathedral	Same music, pressing rhythm	Text «Level 1»	
Scene 8	Path of the colombina that overcomes obstacles while it flies; the obstacles are simple geometric shapes (cube, sphere,)			
Scene 9	Once the level is passed, a congratulatory screen and the text of the curiosity appear	Same music, normal rhythm	Text «Curiosity»	

Scene 10	Repeat the same procedure for levels 2 and 3. Level 2: exterior dome Level 3: interior dome in reverse	
Scene 11	Final scene of the game: video of the brindellone that explodes.	

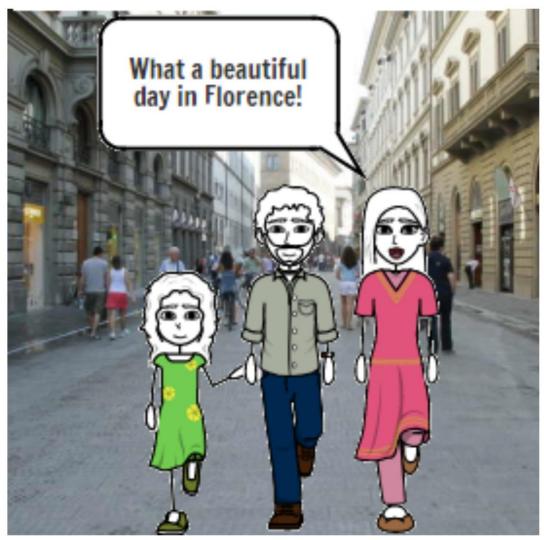
Curiosity 1: how the tradition was born

Curiosity 2: where the «brindellone» is kept

Curiosity 3: one of the last failures of the colombina was in 1966, the same year of the flood

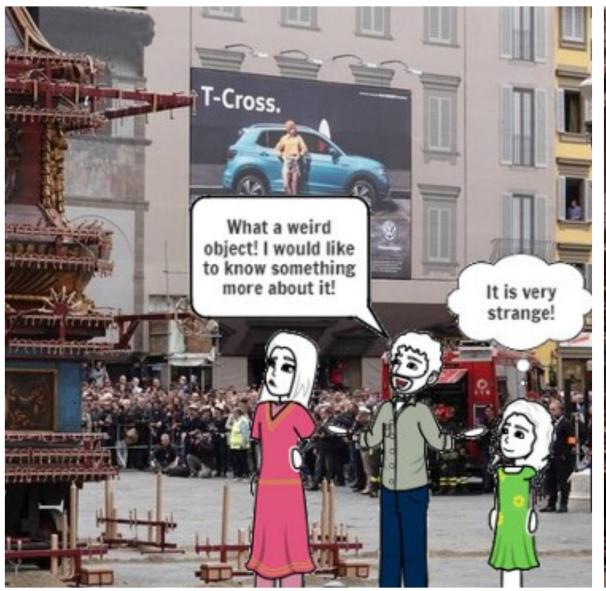
USE CASE SCENARIO

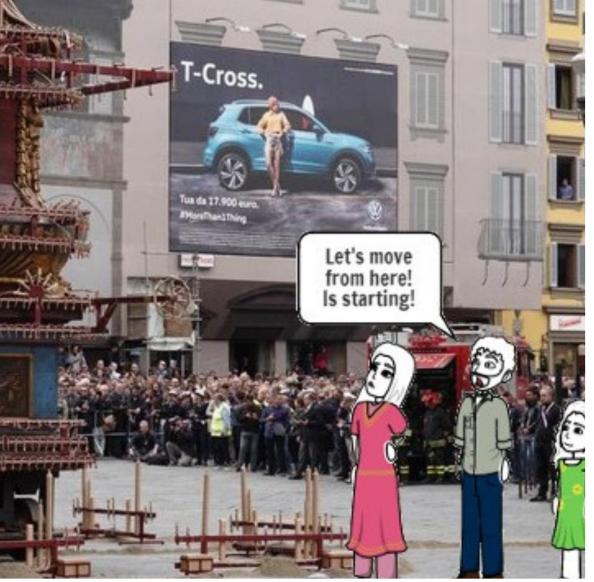
























PHYSICAL MM DESIGN

Summing up:

- Smartphone application/game → type «runner»
- Use of touch screen
- Augmented reality
- 3D reconstruction
- Need for GPS





3D RECONSTRUCTION

Laser scanning

Laser FARO Focus3D X 330 rental 199,00€ per day

Software *FARO Scene*Free trial for 30 days

https://www.faro.com/

AUGMENTED REALITY



wikitude

Location based AR → virtual objects are anchored to the real world

GPS → switched on + Internet connection

Software Wikitude

- One-time fee SDK PRO 3D Price 2.490,00€
- Subscription SDK PRO 3D Price 2.990,00€

FEATURES

- √ Geo
- ✓ 2D Image Recognition
- √ 3D Engine
- ✓ Instant Tracking (SLAM)
- ✓ Object Recognition
- ✓ Scene Recognition

APPLICATION DEVELOPEMENT



Steps:

- Design → graphics
- Development \rightarrow programming

Yeeply developers

https://it.yeeply.com/

Average development cycle → 18 weeks

APPLICATION DEVELOPEMENT

Approximate price (with Yeeply):

- App Android + iOS
- AR app
- Design + Development
- Good value for money

Price 12.480€

- <u>Smartphone game</u>
- Type of game: <u>«runner»</u>
- Design + Development
- Good value for money

Price 16.850€



Higher weight of the graphics. Needs to be of good quality and weight little at the same time, to be sure that the game works properly.

COMMUNICATION STRATEGY

If the user is connected to the Wi-Fi network in Florence (very simple operation that does not require any type of registration) he receives a notification informing him of the existence of the game and invites him to download it.

During his stay, a tourist will certainly visit the Piazza del Duomo.

Once there, all you have to do is play; the game takes a few minutes. We try to avoid boring the user, who has to move around the square looking for objects that unlock the levels to continue the game.

While the player searches for objects, he may be attracted by something that interests him. This is both a good and a bad thing: a good thing because once the game is over the user has found something else to visit; a bad thing because he could abandon the game to visit immediately what caught his attention.

To encourage the player to finish the game, at the end of the 3 levels a discount voucher could be issued to visit a museum to choose from those proposed (Museo dell'Opera del Duomo; Uffizi; Galleria dell'Accademia; ...).