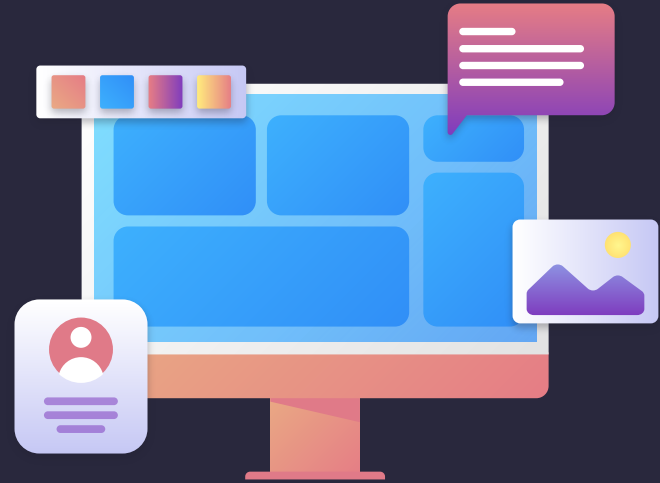# / M1: presentation of the life cycle objectives and calendar for the project

Group 4 - Football Commentator

/01

/TEAM PRESENTATION

Team members and academic advisors ⟶

/THE TEAM

Isabel Rosário

Miguel Ferreira

Lucius Vinicius

Dinis Lei

Afonso Campos
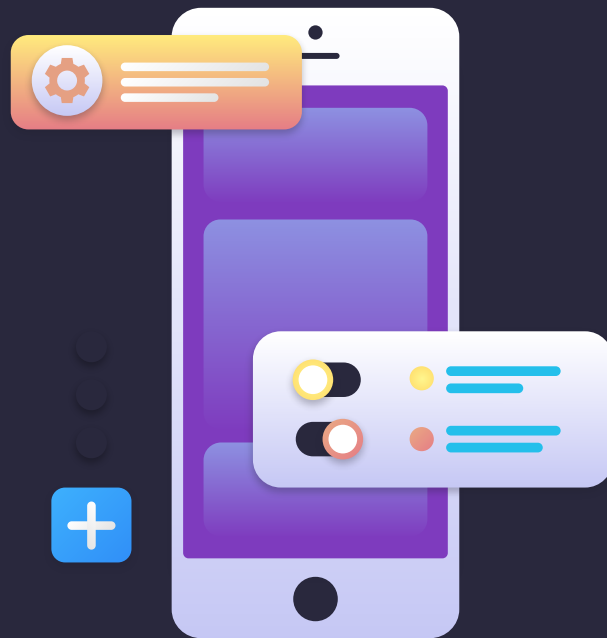
/ACADEMIC ADVISORS

Professor Nuno Lau
IEETA

Professor António Teixeira
IEETA

/02

/THE PROJECT

Project theme and context ⟶

/THE CONTEXT AND THE PROBLEM

RoboCup is an "initiative with the goal to advance the state of the art of intelligent robots".

As it stands, Robocup football leagues are lacking proper match commentary as a way to fully immerse viewers.

This project will focus on taking **player and ball position logs** of RoboCup's Simulation Soccer League and outputting **commentary in natural language and game analysis**.

/OUR GOALS

- Extraction of events and game analysis
- Generation of game commentary in natural language
- Expressive text-to-speech narration, reflecting emotions and bias through tone
- Expressive graphical model of the commentator that accompanies the narration, reflecting emotions and bias through body expression
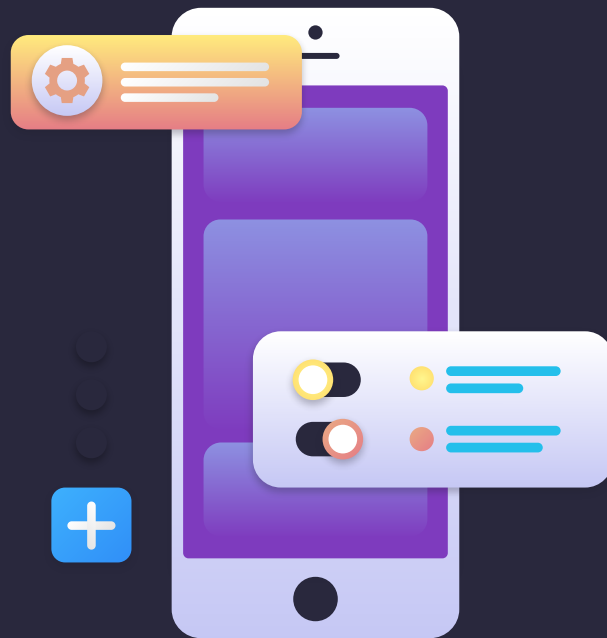
/EXPECTED RESULTS

- Event extraction and game analysis tools

- Fully functioning RoboCup commentator with voice and graphical model functionalities

- Web-based interaction between user and commentator (frontend)

/03

/CALENDAR

Project theme and context ⟶

/PROJECT SCHEDULE: CONSTRUCTION

- **Module 1: Project base** **|| 5 weeks || 12/04 – 16/05**
  - **AI and Machine Learning**
  - **Graphic Model**
  - **Voice**
  - **Frontend**

- **Module 2: Voice, emotion and bias || 4 weeks || 17/05 – 14/06**
  - **Expansion of all points in Module 1**

/MILESTONES AND DELIVERABLES

Milestones	Deliverables
M1: Lifecycle objectives and calendar for the project	PowerPoint Presentation
M2: Lifecycle architecture	PowerPoint Presentation
M3: Prototype and mid-term presentation	Working Prototype
M4: Final project presentation	Final Product and Report

/THE TASKS: BOT

Name of Task	Description	Members
Event Labeling (M1)	Tagging the events that occur in a match.	All
Event Processing (M1)	The robot must identify the possible events given the position logs.	Afonso, Dinis and Lucius
Phrase Construction (M1)	The robot must select the best phrase for the current event.	Afonso, Dinis and Lucius
Recognizing Emotion (M2)	The robot must recognize which emotion to express during each event.	Isabel and Miguel

/THE TASKS: VOICE

Name of Task	Description	Members
Text-to-Speech (M1)	Convert the text in natural language to vocal narration.	Isabel and Miguel
Emotion (M2)	The voice tone must reflect the detected emotion for the situation.	Isabel and Miguel
Personalization Settings (M2)	Details about the voice can be personalized, such as gender.	Isabel and Miguel

/THE TASKS: FRONTEND

Name of Task	Description	Members
Build Model (M1)	Building a graphical model that represents the commentator.	Isabel
Emotion (M2)	The body expression of the model must reflect the detected emotion for the situation.	Isabel
Frontend Development (all)	Development of a website through which the user can interact with the commentator.	Isabel, Miguel and Lucius

/THE TASKS: FUTURE WORK

Name of Task	Description
Processing of Human Soccer (FW)	The robot must read human player soccer as well.
Video Source (M3)	The client must upload a video to generate the text. Streaming is another option.

/RELATED WORK

- [Cric-Talk](#)

- [IBM's Live Sport Commentator](#)

- [IBM Soccer Commentary](#)

- [AI Commentator](#)

- [ROCCO (RoboCup Commentator)](#)

- [Automated Sports Video Camera](#)

TECH · ARTIFICIAL INTELLIGENCE
IBM Trials A.I. That Can Do Soccer Commentary
BY JEREMY KAHN
December 9, 2019 10:56 PM GMT

Rocco (RoboCup Commentator)

Record - Live Stream - Game Stats
Automated Sports Video Camera

/COMMUNICATION PLAN

/PROJECT PRESENTATION WEBSITE

https://rospuye.github.io/index.html

/REPOSITORY

https://github.com/rospuye/PI21-22_ComentadorFutebol

/CONTACT US

isabel.rosario@ua.pt