| PROJECT NAME: **RefPedia** TEAM MEMBER: **ARIȘANU MIHAI** | IDEA IN SHORT: ***RefPedia*** is:
 • a mobile app dedicated to those who want to become a basketball referee or basketball enthusiasts who want to understand the rules of the games
 • an Expo React Native app with FireBase |

Hardcore entrepreneur **hackathon** 5.0

1.PRODUCT - PROBLEM WE SOLVE

Our mission is to create an innovative, easy-to-use application that helps basketball referees or aspiring basketball referees

Functionality:
- Using the application as a registered user or as guest
- Learning the rules from videos
- Train and test the hand signals of referee
- Improving decision-making through examples from real matches
- Training future basketball referees to obtain the referee license

Soon
- Integration of an AI model that analyzes hand signals recorded by the user in response to a given situation (practical hand signals)
- Recording user progress
- Testing the application on a large scale

2. OUR TARGET GROUP

The number three goal of **United Nations Sustainable Development** is *to ensure healthy lives and promote well-being for all at all ages*.
Children, young people, people in general should be encouraged to do sport, and sport without rules means chaos.
Therefore, any basketball enthusiast should understand the referees' signals, moreover young people can turn a passion into a career, going from a fan of the sport to a referee. It comes as no surprise to anyone that young people are reading less and less and their ability to understand/learn what they read is reduced. Thus, watching a video or using a mobile app for learning are educational tools adapted to today's young people.
RefPedia's main target group are people who want to become basketball referees or beginner basketball referees who want to improve their skills

3. SMART OBJECTIVES

S: Develop an intuitive mobile that provides aspiring and current basketball referees with interactive training, rule-learning through videos, hand signal practice, and decision-making exercises based on real-game scenarios.
M: Achieve 1000 downloads and onboard 500 active users within the first year and a minimum 4.5-star rating across app stores.
A: Leverage user-friendly design, expert-driven content, and interactive features to attract and retain basketball referees and enthusiasts. Implement AI-driven hand signal recognition and performance tracking within 6 months.
R: Address the need for structured, practical referee training by offering a digital solution that enhances rule comprehension, signal mastery, and real-time decision-making skills, ultimately preparing users for official referee licensing.
T: Launch the MVP (Minimum Viable Product) within 6 months and conduct large-scale testing within 12 months to ensure scalability and effectiveness.

4. PRICE

Incomes for the first year for 500 active users:
- using a free plan with ads and a premium plan without ads price will be $2/month
- 10% pay subscription (50 users) => 50*2=$100/month
- 450 see ads => 450 users * 20 days per month * 3 ads = 27000 views per month
- 27000/1000 * 1.5 = $40.5/month
- total: $140.5/month in the first in a realistic scenario

Costs:
- for google play $25 for uploading and 15% of annual income (less than $1M income)
- For App Store $99 every year for uploading and 15% of annual income (less than $1M income)
- The firebase email authentication is free same with firestorm database because our dates will be less than 1 GiB
- Cloud server for AI around $250/month — google Cloud, but only for the video recognition AI when the app will have more than 200 premium plans very month

5. PROMOTION

Already done
- The idea of the application is a direct consequence of the difficulties I had in preparing for the license exam.
- The opportunity to develop the application was discussed with Marius Epure former national referee, coordinator of young referees in Valcea county
- The application has been tested by my colleagues, beginner referees from Valcea county.
- I have already talked with Ciprian Stoica, an official FIBA referee with more than 900 official games and a referee teacher at Romania's Central College of Basketball Referees (CCAB), and he told me that he would promote this app when it was ready to launch.

Promotion of the app will be through CCAB via a video demo of the app.
If the feedback is positive from the Romania Central College of Basketball Referees, we can talk about a collaboration with FIBA