

Concept Paper Structure:

1. Title of the Project

- A Personalized Mobile Application for Managing Competitive State Anxiety in Athletes

2. Team Details (university, names, year of study, contact number and email)

- University – Sabaragamuwa University of Sri Lanka
- Name – A.G.B.R.I. Thilakarathna
- Year of Study – 2018/2019 batch
- Contact Number – 0769480495
- Email – imaathilakarathna@gmail.com

3. What challenge/ issue are you addressing?

- Athletes often experience Competitive State Anxiety (CSA), which negatively affects performance, confidence, and overall well-being. Current interventions provide general coping strategies, but they fail to recognize that athletes respond differently depending on their personality traits and anxiety types. There is a lack of personalized, accessible, and sport-specific digital tools to effectively manage CSA.

4. Briefly explain your idea or innovation.

- The proposed innovation is a mobile application that identifies an athlete's personality traits and anxiety profile, then recommends personalized coping strategies such as breathing exercises, visualization, self-talk, and routines. The app provides step-by-step guidance, daily plans, and progress tracking, ensuring athletes receive tailored mental support that enhances focus, calmness, and competitive performance.

Objectives

1. To assess athletes' personality traits using a standardized model.
2. To identify athletes' anxiety types (cognitive, somatic, and self-confidence levels).
3. To generate personalized coping strategies based on personality-anxiety interaction.
4. To provide step-by-step guidance for implementing coping strategies.
5. To enable athletes to track progress and monitor improvements in anxiety management.

Key Features

- Personality Trait Assessment (Big Five inventory).
- Anxiety Type Identification (Competitive State Anxiety Inventory-2).
- Personalized Coping Strategy Recommendations based on profile matching.
- Coping Strategy Library (guided breathing, visualization, self-talk, mindfulness, routines).
- Progress Tracking Dashboard (trends in anxiety, coping effectiveness).

App Flow (User Journey)

1. Onboarding → Registration & introduction.
2. Assessments → Personality + Anxiety profiling.
3. Personalized Dashboard → Displays results & recommended strategies.
4. Coping Hub → Library of detailed strategies with instructions.
5. Routine Builder → Pre-competition and daily practice plans.
6. Progress Tracker → Graphs, feedback, and improvements.
7. Continuous Adaptation → Recommendations updated based on progress.

5. Who benefits and how?

- Athletes, coaches and sports psychologists (as supporting stakeholders) benefit through personalized anxiety management, improved performance consistency, and mental resilience in competitive environments.

Declaration

I/We hereby declare that the information provided in this application is true and accurate to the best of our knowledge. We understand that shortlisted teams must be available to present their innovation in person on 6th November 2025, during Day 1 of the ICAS 2025 Conference.

Signature of Team Leader: A.G.B.R.I. Thilakarathna

Date: 31/08/2025