

# PERSONALISED DIGITAL LEARNING COMPANION

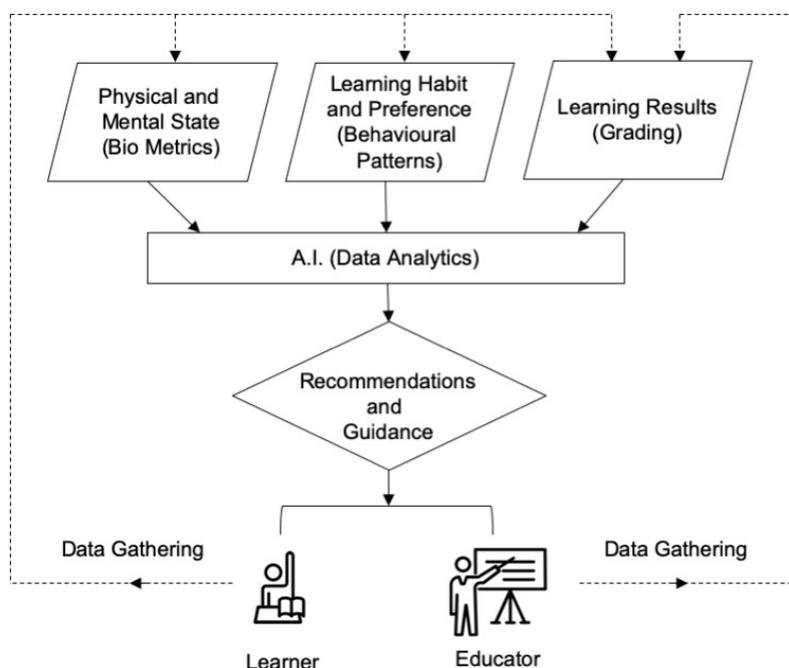
## CONTEXT

Edtrix Innovations is a Singapore-based educational technology company, focusing on enriching learning experiences through innovations in the areas of automated essay grading, adaptive learning and assessment, and learning companion.

Recently, the maturity of emerging technologies has given rise to opportunities for educational agents to explore exploiting such technologies to develop new learning environments for learners. Many pedagogical agents are beginning to focus on the application of AI and cognitive science to better support the differing needs and capabilities of each learner in different geolocations, alleviating the learning process with individualised attention.

While there are existing intelligent tutoring systems in the market, Edtrix Innovations is looking for an effective digital learning companion system that is both a smart tutor and a learning companion that can impart knowledge as well as motivate the students to learn better.

### Digital Learning Companion



With a view of the future networked learning environments, Edtrix Innovations is keen to seek a technology partner for the co-development of the learning companion to fit the needs of each student in a blended learning environment.

## **PROBLEM STATEMENT**

How might we create a capable digital learning companion that provides optimal recommendations and guidance based on the learner's physical and mental state, learning habits, preferences, and academic results?

## **WHAT ARE WE LOOKING FOR**

Proof-of-concept solution for a digital learning companion capable of:

- Supporting, encouraging and guiding a learner throughout the learning journey
- Seamless and proactive analysis of user's behavioural patterns and biometrics

User-friendly proof-of-concept solution containing the following features:

- Learn the user's preferences, behaviour, and personality;
- Monitor and respond in real-time to user's affective state such as blood volume pulse, sleep activity, ECG; and
- Provide appropriate guidance based on a learning profile.

There are no restrictions on the geographic location of the problem solvers who may choose to apply to this challenge. However, the POC needs to demonstrate in Singapore.

## **POSSIBLE USE CASE**

Jessie is a Secondary one student. Her digital learning companion – Betsy, has been with her since Primary 1.

- Interaction: Jessie greets Betsy, the system senses that Jessie is tired and lethargic, and recommends her to take a rest before starting her homework.
- Planning: Based on Jessie's daily schedule, behavioural patterns, and preferences, Betsy plans for her time to start and complete each work assignment with logical breaks in between, just the way she likes.
- Teaching: Without prompting, Betsy notes that Jessie has difficulties in completing her homework. The system coaches Jessie through notes and other available resources on that subject, helping her to complete the assignment on-time.

## **WHAT'S IN IT FOR YOU**

- SGD 25,000 of prize money for each winner of this challenge (See Award Model)
- There is the opportunity to form partnership and co-build the definition of Learning Companion
- Access to resources for proof-of-concept testing

## EVALUATION

The solutions will be evaluated based on the criteria below:

<b>Solution Fit</b>	To what extent does the proposed solution address the problem statement effectively?
<b>Solution Readiness</b>	How ready is the proposed solution to go to the market? Is there any evidence to suggest capacity to scale?
<b>Solution Advantage</b>	If the solution is truly innovative, does it make use of new technologies in the market, and can it potentially generate new IP?
<b>Company Profile</b>	Does the product have user and revenue traction? Do the team members possess strong scientific/technical background?

## AWARD MODEL

30% of the prize money will be awarded to each selected finalist at the start of the POC, with the remainder 70% allocated during the POC, based on milestones agreed between Edtrix Innovations Pte Ltd and the solver.

Note that a finalist who is selected to undertake the POC will be required to enter into an agreement with Edtrix Innovations Pte Ltd that will include more specific conditions about the POC.

## DEADLINE

All submissions must be received by **5 June 2020, 1600 hours (SGT/GMT +8)**. Edtrix Innovations Pte Ltd and IMDA may extend the period of the submission at their discretion. Late submissions are disqualified.