



Co-funded by
the European Union



Implemented by



Request for Proposals 81-5-25

Development of AI-powered Gamified Learning Platform for Entrepreneurship

Location: Bosnia and Herzegovina

Reporting to: Project Manager, Future Minds Lab Initiative

Type of Contract: Service - Company or other Qualified Legal Entity

Illustrative level of effort: 95 days

1. Introduction

The Sarajevo School of Science and Technology invites qualified incorporated entities (consulting firms, research institutes, or consortia) to submit proposals for the ***Development of an AI-powered Gamified Learning Platform for Entrepreneurship***. The purpose of this service is to design, develop and roll-out a comprehensive digital learning tool aimed at enhancing entrepreneurship skills in Bosnia and Herzegovina.

2. Background

The Global Innovation Index for 2024 ranks Bosnia and Herzegovina (BiH) 37th among the 39 European nations.¹ This alarming statistic illustrates a consistent lack of investment in research and innovation by the country, negatively and significantly impacting the international competitiveness of the BiH industry. The adoption of technology, and investment in innovation, remain problem areas while BiH institutional performance in support of innovation is assessed especially poorly. All of these factors inhibit business performance and restrict companies' ability to create innovative products and services that can penetrate international markets. The ability of BiH businesses to take full advantage of opportunities presented by the twin green and digital transitions is likewise adversely affected, limiting emerging market and investment opportunities. Against this background, the FutureMinds Lab Initiative, funded under the auspices of the Sustainable Economic Development and Employment Promotion (SEDEP) Program - implemented by GIZ in BiH - works across two parallel streams to address challenges to a more innovative economy for BiH by creating the necessary market conditions and a steady supply of innovation, entrepreneurship and digital skills for the future.

Under the first programmatic stream, the Project will create an enabling space for innovation by first initiating and fostering mutually beneficial relationships between the innovator community and the private sector. This will entail the implementation of detailed needs assessments for key industries to identify points of entry for green innovation in the form of new products, services and/or processes. The findings will be used to mobilize the innovator community to offer new solutions through hackathons that will generate viable product or service ideas, to be further developed and ultimately implemented in partner SMEs.

Under the second programmatic stream, the Project will work towards enabling the development of a new generation of innovative entrepreneurs, focusing in particular on opportunities presented by the twin and digital transitions. Activities under this component include the design and delivery of a comprehensive innovative

¹ <https://www.wipo.int/gii-ranking/en/bosnia-and-herzegovina/section/area-rankings>



Co-funded by
the European Union



Implemented by



entrepreneurship training program, the creation of an AI-powered gamified learning platform for entrepreneurship, and the implementation of a Youth Entrepreneurship Academy that will target the early development of necessary knowledge, skills and abilities in highschool students.

3. Terms of Reference

3.1 Purpose

The transition to a sustainable, digital economy requires a new generation of entrepreneurs equipped with innovative skills and practical knowledge in green technologies and digital transformation. To support this transition, SSST seeks to develop an **AI-powered gamified learning platform** that fosters entrepreneurial capacities, encourages peer learning, and promotes inclusive access to knowledge and mentorship. The platform will target early-stage and aspiring green and digital entrepreneurs.

3.2 Objectives

The main objective is to design, develop, and launch a scalable, AI-powered gamified learning platform that:

- Provides structured learning pathways in green and digital entrepreneurship.
- Utilizes AI to personalize learning journeys based on user behavior and progress.
- Leverages gamification to increase motivation, engagement, and retention.
- Offers community features for networking, collaboration, and peer support.

3.3 Scope of Work

The service provider will be responsible for:

a. Needs Assessment and Platform Design

- Conduct user research with target entrepreneurs and relevant stakeholders.
- Define platform features and content structure aligned with the learning needs.
- Develop detailed wireframes and user experience (UX) flows.

b. Content Integration

- Support integration of existing learning modules or co-create new content in:
 - Green entrepreneurship (e.g., circular economy, sustainable innovation).
 - Digital entrepreneurship (e.g., digital marketing, e-commerce, fintech).
- Ensure content accessibility (mobile-friendly, inclusive design).

c. AI Functionality

- Develop adaptive learning pathways using AI algorithms (e.g., machine learning, natural language processing).
- Implement intelligent tutoring, chatbot support, and recommendation systems.
- Ensure compliance with data privacy and ethical AI standards.

d. Gamification Framework

- Design achievement systems (badges, leaderboards, challenges).
- Create reward systems to incentivize continued participation and milestones.
- Integrate progression mechanics (levels, unlockable content).



Co-funded by
the European Union



Implemented by



e. Technical Development

- Build a cloud-based web and mobile platform using modern frameworks.
- Ensure robust architecture for scalability, security, and high performance.
- Enable user analytics, reporting, and progress dashboards.

f. Testing and Quality Assurance

- Conduct functional, performance, and usability testing.
- Gather feedback from a pilot group of users and refine the platform accordingly.

g. Training and Handover

- Provide training sessions and manuals for platform administrators.
- Deliver source code, documentation, and deployment instructions.

3.4 Deliverables

1. Inception Report and Workplan
2. User Research Report and Program and Platform Design
3. Functional MVP (Minimum Viable Product)
4. Final Platform (Web & Mobile) with all modules integrated
5. Training and Handover Documentation
6. Final Report

3.5 Timeline

The duration of the assignment is estimated at **six months**, commencing from the date of contract signing. A detailed timeline with milestones will be agreed upon during the inception phase.

3.6 Team Composition and Required Expertise

The selected service provider should demonstrate expertise in:

- Entrepreneurship and entrepreneurship training design (green and digital)
- AI/ML development and ethical AI principles.
- Gamification strategy and learning experience design.
- Platform development (front-end and back-end).
- UX/UI design for inclusive and accessible digital tools.

A multidisciplinary team is preferred, including:

- Project Manager
- Entrepreneurship Specialist
- AI Developer
- UX/UI Designer
- Full Stack Developer

3.7 Eligibility and Qualifications

- Proven experience in developing AI-powered applications and/or platforms.
- Portfolio of at least two comparable projects.
- Experience working with international organizations, startups, or development agencies.



Co-funded by
the European Union



Implemented by



- Strong commitment to ethical and inclusive technology development.

3.8 Budget and Payment Schedule

The budget will be determined based on the proposal and deliverables. A milestone-based payment schedule will be applied, with disbursements made upon satisfactory delivery and approval of each stage.

3.9 Proposal Submission Guidelines

Interested bidders should submit the following:

- Technical Proposal (approach, methodology, work plan, team CVs)
- Financial Proposal (see Annex 1. Financial Proposal Form)
- Company Profile and Relevant Project Portfolio

3.10 Selection criteria

Criterion	Weight
Technical approach and methodology	25%
Experience and qualifications of the team	25%
Relevant past performance	25%
Financial proposal (cost-effectiveness)	25%

3.11 Language of the Assignment

The assignment will be delivered in local language, but the successful service provider must be able to communicate effectively in English as well to allow for access to international data sources.

4. Submission Deadline

All interested candidates are to submit their bids with all supporting documents no later than **June 16, 2025, 23:59**. All bids are to be submitted electronically to the following email address: *info@ssst.edu.ba*, with the subject note: *81-5-25 Development of AI-powered Gamified Platform for Entrepreneurship Learning*. **Any inquiries regarding the opportunity may be directed to the same address and subject line.**



Co-funded by
the European Union



Implemented by



Poziv za dostavljanje ponuda 81-5-25

Razvoj AI-platforme za gamificirano učenje o poduzetništvu

Mjesto usluge: Bosna i Hercegovina

Izvršavanje prema: Menadžeru projekta, Future Minds Lab Inicijativa

Vrsta ugovora: Usluga – Pravna osoba (firma, institut ili konzorcij)

Okvirni nivo angažmana: 95 radnih dana

1. Uvod

Sarajevska škola za nauku i tehnologiju (SSST) poziva kvalifikovane pravne osobe (konsultantske firme, istraživačke institute ili konzorcije) da dostave ponude za uslugu razvoja AI-platforme za gamificirano učenje o poduzetništvu. Cilj ove usluge je dizajn, razvoj i implementacija sveobuhvatnog digitalnog alata za učenje koji će unaprijediti poduzetničke vještine u Bosni i Hercegovini.

2. Kontekst

Globalni indeks inovacija za 2024. godinu rangira Bosnu i Hercegovinu na 37. mjestu među 39 evropskih zemalja. Ovaj zabrinjavajući podatak ukazuje na kontinuirani nedostatak ulaganja u istraživanje i inovacije, što negativno utiče na međunarodnu konkurentnost domaće industrije. Usvajanje tehnologije i ulaganje u inovacije su limitirani, dok je institucionalna podrška inovacijama u BiH ocijenjena posebno lošom. Sve navedeno ograničava poslovne rezultate i sposobnost preduzeća da kreiraju inovativne proizvode i usluge za međunarodna tržišta.

Future Minds Lab Inicijativa, finansirana u okviru Programa održivog ekonomskog razvoja i promocije zapošljavanja (SEDEP), koji implementira GIZ u BiH, ima za cilj unapređenje spomenutog stanja.

Inicijativa djeluje kroz dva paralelna pravca:

- Prvi pravac uključuje stvaranje povoljnog okruženja za inovacije povezivanjem inovatora i privatnog sektora. To uključuje analize potreba u ključnim industrijama, organizaciju hakatona i razvoj inovativnih rješenja za MSP.
- Drugi pravac fokusira se na razvoj nove generacije inovativnih preduzetnika, s naglaskom na zelenu i digitalnu tranziciju. Aktivnosti uključuju dizajn i implementaciju inovativnog programa obuke iz poduzetništva, razvoj AI-gamificirane platforme za učenje i organizaciju Akademije za omladinsko poduzetništvo u srednjim školama

3. Opis projektnog zadatka

3.1 Namjena

Tranzicija ka održivoj i digitalnoj ekonomiji zahtijeva novu generaciju poduzetnika sa inovativnim vještinama iz oblasti zelene tehnologije i digitalne transformacije. SSST želi razviti AI-gamificiranu platformu koja podstiče preduzetničke kapacitete, omogućava učenje među vršnjacima i obezbjeđuje inkluzivan pristup znanju i mentorstvu. Platforma će ciljati početnike i aspirativne zelene i digitalne poduzetnike.

3.2 Ciljevi

Glavni cilj je dizajnirati, razviti i implementirati skalabilnu AI-platformu koja:



Co-funded by
the European Union



Implemented by



- Nudi strukturirane puteve učenja o zelenom i digitalnom poduzetništvu.
- Koristi AI za personalizaciju učenja na osnovu ponašanja korisnika.
- Uključuje elemente gamifikacije radi povećanja motivacije i angažmana.
- Omogućava umrežavanje i podršku zajednice korisnika.

3.3 Obim rada

a. Procjena potreba i dizajn platforme

- Istraživanje potreba korisnika i relevantnih aktera.
- Definisanje funkcionalnosti i strukture sadržaja.
- Razvoj žičanih modela (wireframes) i UX tokova.

b. Integracija sadržaja

- Uključivanje postojećih modula i/ili razvoj novih iz oblasti:
 - Zeleno poduzetništvo (npr. cirkularna ekonomija, održive inovacije)
 - Digitalno poduzetništvo (npr. e-trgovina, digitalni marketing, fintech)
- Osiguranje dostupnosti sadržaja (mobilna podrška, inkluzivni dizajn)

c. AI funkcionalnosti

- Razvoj adaptivnih puteva učenja koristeći AI algoritme.
- Implementacija chatbota, preporuka i inteligentnih tutor sistema.
- Poštivanje standarda privatnosti i etike u AI razvoju.

d. Gamifikacija

- Dizajn sistema dostignuća (bedževi, rang liste, izazovi).
- Razvoj sistema nagrađivanja za angažman i napredak.
- Mehanizmi napredovanja (nivoi, otključavanje sadržaja).

e. Tehnički razvoj

- Izrada cloud-bazirane web i mobilne platforme.
- Robusna arhitektura za skalabilnost, sigurnost i performanse.
- Uvođenje korisničke analitike i nadzor napretka.

f. Testiranje i osiguranje kvaliteta

- Funkcionalno, performansno i korisničko testiranje.
- Povratne informacije kroz pilot testiranje i unapređenja.

g. Obuka i primopredaja

- Obuka administratora platforme i izrada korisničkih priručnika.
- Dostava izvornog koda, tehničke dokumentacije i uputstava.



Co-funded by
the European Union



Implemented by



3.4 Rezultati / Isporuke

1. Inicijalni izvještaj i plan rada
2. Izvještaj o korisničkim potrebama i dizajn platforme
3. Minimalno funkcionalni proizvod (MVP)
4. Finalna verzija platforme (web i mobilna)
5. Dokumentacija i obuka
6. Završni izvještaj

3.5 Vremenski okvir

Trajanje angažmana je šest mjeseci od potpisivanja ugovora. Detaljan plan implementacije biće dogovoren u fazi inicijalnog izvještaja.

3.6 Potrebni tim i ekspertiza

Kandidati treba da posjeduju stručnost u:

- Razvoju obuka iz poduzetništva (posebno zelene i digitalne sfere)
- Razvoju AI/ML aplikacija i etičkim AI principima
- Strategijama gamifikacije i dizajnu korisničkog iskustva
- Razvoju web i mobilnih platformi
- UX/UI dizajnu za inkluzivne alate

Preporučeni tim uključuje:

- Menadžer projekta
- Stručnjak za poduzetništvo
- AI programer
- UX/UI dizajner
- Full-stack programer

3.7 Kvalifikacije i prihvatljivost

- Dokazano iskustvo u razvoju AI-platfomi i aplikacija.
- Najmanje dva slična projekta u portfoliju.
- Iskustvo u radu sa međunarodnim organizacijama, startupima ili razvojnim agencijama.
- Posvećenost etičkom i inkluzivnom razvoju tehnologija.

3.8 Budžet i dinamika plaćanja

Budžet će biti određen na osnovu predloženih aktivnosti i isporuka. Isplata će biti vršena po ispunjenju predefinisanih faza i uz odobrenje rezultata.

3.9 Uputstvo za dostavljanje ponuda

Zainteresovani ponuđači trebaju dostaviti:

- Tehničku ponudu (pristup, metodologija, plan rada, CV-ovi)



Co-funded by
the European Union



Implemented by



- Finansijsku ponudu (vidi Aneks 1 – Finansijska ponuda)
- Profil firme i portfolio relevantnih projekata

3.10 Kriteriji za evaluaciju

Kriterij	Udio u ocjeni
Tehnički pristup i metodologija	25%
Iskustvo i kvalifikacije tima	25%
Relevantno prethodno iskustvo	25%
Finansijska ponuda (isplativost)	25%

4. Jezik angažmana

Angažman će se realizirati na lokalnom jeziku, ali ponuđač mora biti sposoban za efikasnu komunikaciju na engleskom jeziku radi pristupa međunarodnim izvorima podataka i saradnje.

5. Rok za dostavu ponuda

Svi zainteresovani kandidati trebaju dostaviti ponude i svu prateću dokumentaciju najkasnije do **16. juna 2025. godine u 23:59.**

Ponude se dostavljaju elektronski na: **info@ssst.edu.ba**, uz obaveznu naznaku u predmetu emaila: **81-5-25 Razvoj AI-platforme za gamificirano učenje o poduzetništvu.**

Pitanja i pojašnjenja vezana za poziv mogu se poslati na istu adresu i uz isti predmet emaila.



Co-funded by
the European Union



Implemented by



Forma finansijske ponude – 81-05-25

Ime ponuđača	[ime ponuđača]	Datum:	Odaberi datum
---------------------	----------------	---------------	---------------

Ponuđači su obavezni pripremiti svoje finansijske prijedloge prema dolje navedenom format i dostaviti ih zajedno sa tehničkom ponudom. Svaka finansijska informacija koja bude pružena u tehničkoj ponudi rezultat će diskvalifikacijom ponuđača.

Finansijski prijedlog treba biti usklađen sa zahtjevima iz Projektnog zadatka i tehničkom ponudom ponuđača.

Valuta ponude: KM

Tabela 1: Sažetak ukupnih cijena

	Iznos(i)
Profesionalne naknade (iz Tabele 2)	
Ostali troškovi (iz Tabele 3)	
Ukupni iznos finansijskog prijedloga	

Tabela 2: Raspodjela profesionalnih naknada

Ime	Pozicija	Tarifa	Broja dana/mjeseci/sati	Ukupni iznos
		A	B	C=A+B
In-Country				
Home Based				
Subtotal profesionalnih naknada:				

Tabela 3: Raspodjela drugih troškova

Opis	Mjera jedinice	Količina	Jedinična cijna	Ukupni iznos
------	----------------	----------	-----------------	--------------



Co-funded by
the European Union



Implemented by



Troškovi lokalnog	Lump			
Troškovi "iz džepa"				
Ostali troškovi: (molimo navedite)				
Subtotal drugih troškova:				

Tabela 4: Raspodjela cijene po isporuci/aktivnosti

Isporuka/Opis aktivnosti	Vrijeme (osoba/dani)	Profesionalne naknade	Ostali troškovi	Ukupno
Isporuka 1				
Isporuka 2				
Isporuka 3				
.....				

Potpis ovlaštene osobe: