DIGIEDUHACK SOLUTION CANVAS

Title of the solution: GreenRevolution

Team name: SherlockOhms

Challenge addressed: SDG 7, SDG 11, SDG 12, SDG 13

Challenge category: Sustainable Educational Environment

Background of the team: (multiple selections possible in case of mixed teams)

- [x] Higher Education Students
- [ ] Researchers
- [ ] Professionals
- [ ] Teachers
- [ ] Primary School Students
- [ ] Secondary School Students
- [ ] Others (please specify)

Describe it in a tweet

How would you describe your solution in a short catchy way with maximum 280 characters?

Imagine a university that's not just a place to learn, but a living, breathing example of sustainability. Our GreenRevolution turns classrooms into eco-friendly havens, empowering students to learn and innovate for a greener future.

#GreenCampus #Sustainability #EduTech

Innovativeness

What makes your solution different and original? Are there similar solutions or approaches currently available or implemented by education sector practitioners? If so, why and to what extent is your solution better?

Why is our solution different & original?

- Integrates multiple technologies in a cohesive design → Holistic approach
- The integration of all the systems (photovoltaic windows, green roofs)

Solution description

What is the final product/service/tool/activity you're proposing? What are its main elements, technologies and objectives? Could you please include a brief implementation plan with some key overall milestones, resources required and eventual barriers foreseen?
How could your solution be used to enhance digital education nowadays? How could its success be measured?

1

Creation of a green, eco-friendly campus

HOW?

- Rooftop **gardens**
- Solar powered **windows**
- Climate-smart **walls**
- Water collecting **paint**

3

Technology & Objectives

- Rooftop gardens
- Solar-Powered windows
- Climate-smart walls
- Water-collecting paint

4

Success Measurement

- Reduction in campus → Energy consumption, Utility Costs
- Increased student participation in sustainability programs
- Positive feedback → Students, Teachers → Campus comfort, Learning Environment

2

Phase 1: Feasibility Plan (~3 months)

- Conduct surveys → Students, Faculty
- Engage architects, engineers & sustainability experts
- Secure fundings → ERDF, Green Deal Project

Phase 2: Prototype Development (~3-6 months)

- A first pilot university

Phase 3: Real Implementation (~12 months)

Phase 4: Evaluation & Scaling (~+12 months)

HOW?

- Measure → Energy Savings, Water Usage
- !! Expand to other campuses

Target group

Who is/are the target group/s of your solution and how will they benefit from it? Why is your solution relevant to them? how do you plan to engage these groups so you fully meet their specific needs?

Students

Teachers & Academic Staff

HOW?

- Workshops & Trainings
- Collaboration with other universities

Impact

How will your solution catalyse changes in education and what impacts will it have at social and environmental level? Could you provide examples or scenarios illustrating how such changes and impacts might unfold?

- Reduce energy consumption
- Lower carbon emissions
- Promote sustainability

→ a new generation of eco-conscious

Practical Examples

- **Students** learn sustainable practices → renewable energy, water conservation, green spaces.
- **Social Impact**
- **Environmental Impact**

Transferability

Can your solution partly or fully be used in other education/learning contexts or disciplines? Could you provide any example?

Can be scale and adapt → Universities, Schools, Corporate campuses

Architecture, Urban Planning

Sustainability

Once you have a prototype, what are your plans for a further development, implementation upscale and replication of the solution? How do you see it working in the mid- and long term?

In the future…?

Can be expand & replicate

Goal? → Sustainable Low-cost model (Short Term) → A global model (Long Term)

Team work

Present the members of your team.
Why are you the perfect team to develop this work and what are the competencies you all bring in so the solution is developed successfully? What is your expertise within the thematic field concerned? Are you planning to continue working as a team in the future? If so, why?

Adrian, Nicolae, Ramona → Students from Romania (Cluj-Napoca & Bucharest)

Experiences:
-economics;
-electronics;
-informatics.

We want to improve the world, by making it a better space for the future.

Context

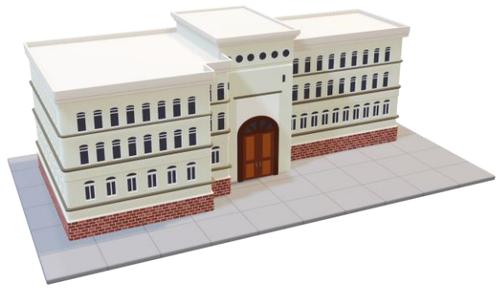
What is the current or future problem you're trying to solve? How does your solution align with DigiEduHack 2024 annual theme?
How does your solution confront the challenge posed by the hackathon organiser and how does it address the challenge category?

Current or Future Problems → High energy consumptions, Poor indoor air quality, Lack of green spaces

DigiEduHack 2024 theme → Creating innovative and sustainable learning environments

How is our solution related?

Transforming campuses into sustainable, technology-enhanced **learning** environments



Costs

Idea	Estimated cost	Observations
Rooftop gardens	~$15,000 per rooftop	including maintenance and initial setup
Photovoltaic windows	~$200 per square metre	with targeted installation, it remains affordable
Climate-smart walls	$50,000 for modifications on existing buildings	depending on the extent of coverage
Water-collecting paint	~$10,000 for campus-wide coverage