



DIGIEDUHACK SOLUTION CANVAS

Title of the solution*	Waters Ally The Best Player for Healthy Lakes										
Challenge Category	Awareness on lake protection and restoration										
Background of the team	<table border="1"> <tr> <td>Higher Education Students</td> <td>Researchers</td> <td>Professionals</td> </tr> <tr> <td>Teachers</td> <td>Primary School Students</td> <td>Secondary School Students</td> </tr> <tr> <td>Others (please specify)</td> <td colspan="2">IT/AI, environment expert, management university student</td> </tr> </table>		Higher Education Students	Researchers	Professionals	Teachers	Primary School Students	Secondary School Students	Others (please specify)	IT/AI, environment expert, management university student	
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(multiple selections possible in case of mixed teams)											



DIGITAL WAVES FOR CLEAN LAKES: EDUCATION FOR FRESHWATER PROTECTION

This hackathon is a joint activity of DIGIEDUHACK2025 and ProCleanLakes EU project

Solution description	Target group
<p>Waters Ally is a web and mobile platform that functions as a centralized hub for localized lake protection, sustainable education, and green investment. Its core purpose is to democratize action, educate on behaviors, and measure impact. Core features include:</p> <ul style="list-style-type: none"> Geo-localized mission map - A dynamic map shows urgent clean-up, monitoring, or restoration tasks posted by NGOs and organizations. Awareness campaigns & Behavioral education - interactive campaigns showing the direct, negative impact of common daily actions on specific, nearby lakes, using real-life visual evidence from restoration sites. Biodiversity info Hub - Each lake location features videos and descriptions of local protected species (plants, migrating birds), emphasizing the unique ecological value being protected. Gamified leaderboards - Users earn Points and ascend the individual Volunteer, Sponsor, and Regional (county/region) leaderboards through quarterly and annual competitions. Storytelling feature (mobile): Users create short, geo-tagged "Story" videos documenting the "before," "during," and "after" of a mission, building an inspiring narrative of community transformation. Learning goals: Users will know the ecological value of their local area and how their personal habits affect it, feel motivated by visible progress, and do direct, measurable actions to support both restoration and green economic growth. 	<p>Waters Ally addresses multiple user groups, segmented by their level of engagement:</p> <ol style="list-style-type: none"> General public (awareness users) - the entire population is the target audience for the awareness campaigns and biodiversity info hub. The goal here is mass behavioral education, helping individuals understand how their daily habits (e.g., oil disposal, waste management) directly impact local lake pollution, using compelling visual evidence. Active volunteers (action players) - this core group includes students, families, and community enthusiasts who actively participate in missions. They are motivated by the competitive leaderboards and the rewards and gifts provided by sponsors for completing missions or winning regional/annual challenges. NGOs and green innovators - they act as the primary mission organizers and project proponents in the B2B Hub, utilizing the platform to mobilize resources and funding. Corporate partners and Businesses - their role is multifaceted: they can launch their own missions (CSR-driven volunteer events for employees), participate actively through employee volunteering, and, most importantly, they can provide prizes and gifts that heavily incentivize participation. They also engage for CSR/ESG visibility via the Leaderboards and the B2B Investment Hub.

Visual Mock-up/ Prototype of the App	Impact	Team work
	<p>The expected impact is a significant transformation in user behavior and an increase in local and regional economic engagement. The awareness campaigns will directly reduce polluting habits (e.g., sink oil disposal) by showing real visual evidence from local lakes, making the learning immediate and consequential. The platform fosters habits of stewardship, turning volunteers into community leaders. The region prize and sponsor leaderboards incentivize administrative and corporate mobilization, turning ecological goals into shared, competitive regional targets.</p> <p>Measurable Impacts</p> <ul style="list-style-type: none"> Behavioral change - tracking engagement with awareness campaigns and documenting self-reported changes in key habits. Green investment - monitoring the number of projects posted in the B2B investment hub and the number of people interested in investing in sustainable lake-related businesses. Volunteer action - tracking active users, completed missions, and total volunteer hours logged. Regional mobilization - quantifying total points collected per region to measure and reward regional engagement and impact. 	<p>Team Leader Name: Răzvan Adrian TUDORAN Team Members' Names: Violeta Cornelia DOMNITANU, Dănuț Florin DOMNITANU, Ionela COTLOGU, Diana Mădălina PODARU, Ionela ROTARU</p> <p>Roles and Expertise</p> <p>Our 6-member team offers a rare and powerful intersection of skills, making our prototype technically robust and economically viable. The core technical leadership comes from our Team Leader (master's degree in IT, AI consultant, and management student) and Violeta (master's degree in IT, AI consultant). Having completed their Master's studies, this technical foundation provides advanced expertise in artificial intelligence (for data analysis and leaderboards) and tech development.</p> <p>Dănuț (IT test manager, project management expert) ensures project feasibility, budgeting, and efficient workflow execution using Scrum methodologies. The vital ecological and content component is covered by Ionela (master's degree in environmental protection, ecologist expert), who guarantees the scientific accuracy of our awareness campaigns and biodiversity Hub.</p> <p>Mădălina and Ionela (Management students) drive the business vision, specializing in sustainable construction and eco-friendly tourism. This perspective is crucial for developing the B2B investment Hub, ensuring that our solution is not only ecological but also economically attractive and scalable for corporate partners.</p>

Challenge Addressed

The core challenge is the **gap between scientific knowledge about lake threats (pollution, unsustainable use) and visible, local citizen action**. This is aggravated by a lack of awareness regarding how seemingly minor **everyday habits** (e.g., disposing of cooking oil, littering) directly contribute to water degradation. Furthermore, a dedicated platform for **sustainable corporate investment** in ecological projects is missing. Our solution, **Waters Ally**, addresses this by providing an engaging platform that connects: **direct action (Missions)**, **behavioral education** (Awareness Campaigns), and **green economic development** (B2B Investment Hub), driving collective responsibility and accelerating local ecosystem recovery.

Innovativeness

Waters Ally's innovativeness lies in its integration of a complete **action-education-investment loop**.

- Behavioral Education with Real Evidence:** The Awareness Campaigns are innovative by utilizing **real, geo-tagged visual evidence** (photos/videos) from specific local lakes to demonstrate the immediate impact of daily habits (like improper waste disposal), making the educational content highly relevant and emotionally compelling.
- B2B Sustainable Investment Hub:** This is a crucial innovation that transforms environmental clean-up into **green economic opportunities**. It moves beyond simple corporate donation by facilitating high-impact, long-term partnerships (e.g., multiple companies co-funding a natural fishery), ensuring the economic viability of ecological projects.
- Geospatial Gamification and Regional Incentive:** The map-based reward system (points/leaderboards) and the **Region Prizes (Volunteer, Sponsor, Corporate, Region)** create a highly engaging competitive structure that drives participation at both the individual volunteer and the institutional level.

Sustainability

The solution is sustainable due to its built-in, diversified funding model and its role as an economic enabler.

- Funding Strategy:**
 - Public Funds and Donations:** Obtaining **government grants and European funds** (e.g. Horizon Europe, national environmental program) aligned with water protection objectives. Also, integrating a simple individual **donation** function from engaged citizens or companies who want to support the platform or missions.
 - Also, a **Service Fees** charged to companies for successfully committing to or implementing projects facilitated by the **B2B Investment Hub**.
- Low Operational Costs:** The platform minimizes content creation and mission execution costs by relying heavily on **user-generated content** (Stories, Mission Data) and volunteer effort. The educational content is enhanced by local NGOs and experts.
- Economic Value:** By actively facilitating sustainable green investments through the B2B Hub, **Waters Ally** becomes an engine for local **green economic growth**, ensuring its continued relevance to both environmentalists and businesses long beyond the initial launch.

Team work

Team Leader Name: Răzvan Adrian TUDORAN
Team Members' Names: Violeta Cornelia DOMNITANU, Dănuț Florin DOMNITANU, Ionela COTLOGU, Diana Mădălina PODARU, Ionela ROTARU

Roles and Expertise

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