



CosmicEchoes4UA: Blending Ukrainian Cultural Heritage with Space

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DigiEduHack23 Challenge

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CosmicEchoes4UA

initiative stands as a beacon of innovation and preservation, aiming to intertwine the rich tapestry of Ukrainian cultural heritage with the infinite expanse of the cosmos. Utilizing the vast database of space's open space data, our mission is to construct a digital platform that not only archives but brings to life the vibrant history and artistry of Ukraine.

Impact:

- **Students** - sparking a fusion of interest in space and heritage, fostering digital fluency and a new perspective on learning.
- **Educators** - equipping teachers with interactive tools for cross-disciplinary curricula that bring the cosmos into the classroom.
- **Cultural Heritage** - providing a global stage for Ukrainian heritage, ensuring it thrives and transcends current adversities.
- **Global Community** - strengthening Ukrainian cultural ties, offering a shared digital space for celebration and connection.

Outcome: A synergy of education, preservation, and community, where Ukrainian culture and cosmic discovery create a legacy that echoes through time.





Defining the problem

Our team is tackling the challenge of:

- protecting the physical representations of Ukraine's cultural identity and history;
- providing a resilient, digital means of safeguarding and sharing Ukrainian culture globally;
- engaging educational communities with Ukrainian heritage in an interactive, modern format that transcends geographical and political barriers;
- ensuring the continuity of cultural education and appreciation for future generations, regardless of the ongoing crisis.



Innovation

CosmicEchoes4UA stands out with its original ideas and unique approach:

- Virtual Space Museum
- Celestial Narrative
- AR Exploration
- Astro-Folklore Integration
- Educational Resources
- Community Participation
- Co-operation in Space Art

Our digital instruments

- Online board games that show the effects of war and how communities can help foster concepts like peace
- Creating an online puzzle about culture
- YouTube Videos or TiK ToK videos
- Application Arts & Culture ([How to Use Google Arts & Culture - YouTube](#)) explore places , galleries, museums The application uses Google street view for virtual tools . You can you art zoom to see different places with different categories such as sports , color , zoom in , time during different periods
- Students' interaction through social networking media
- Student exchange through Erasmus
- Role play scenario where students take different roles such as local residents or journalist
- Use of advertising spots for example in social media
- Creation of interactive lab
- Digital libraries or on line databases to store cultural elements
- 3D printing technology to recreate damage monuments
- Use of Photographs
- Google Earth with graphic display



Blending Ukrainian Cultural Heritage with Space

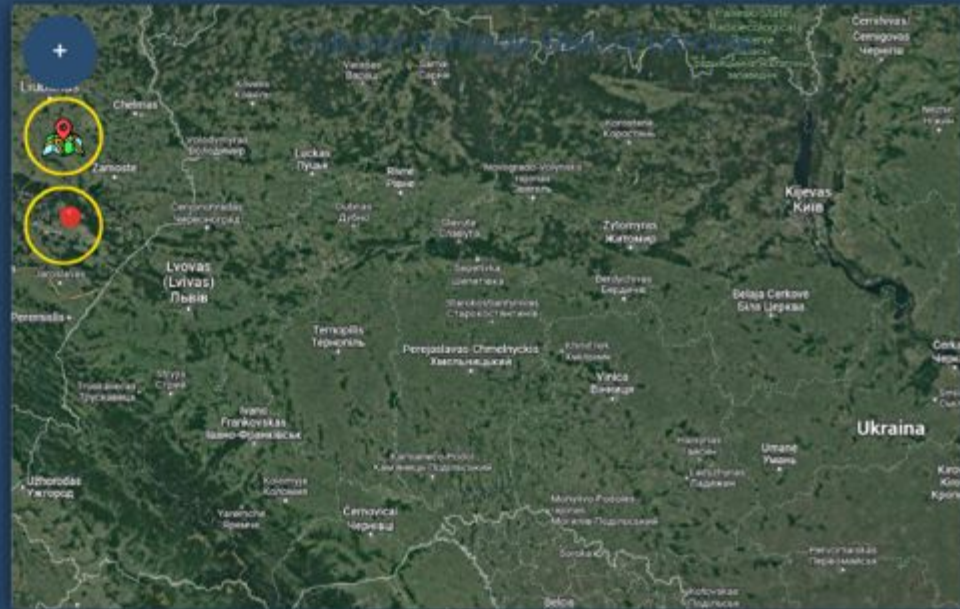
Project includes the development of an online platform that will gather space and geo data which will present the current status of cultural heritage sites and monuments in Ukraine.

EXPLORE

CosmicEchoes4UA

On this map, you can see marked all the most important cultural properties of Ukraine so far.

Using satellite imagery you can spot cultural heritage objects easier



CosmicEchoes4UA

On this map, you can see marked all the most important cultural properties of Ukraine so far.

Using the tool on the top left corner of the map you can enter a new cultural site that is not already listed.

You can also enter cultural objects that have already been destroyed or affected

CosmicEchoes4UA



Using satellite imagery to spot destroyed cultural properties

Using satellite high resolution satellite imagery is a great tool to spot war affected buildings and cultural sites



Collecting proof about the damage and sharing history of the cultural sites in danger

All the marked objects should have their description and photos added to them

If the property was destroyed, this info should be added: date of destruction, cause

The public could add photos showcasing the effect of war on the cultural properties

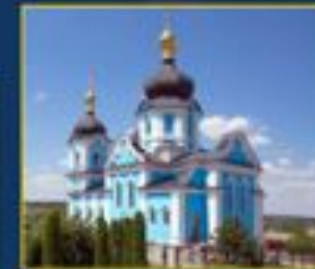
A digital palette of before and after photos of cultural heritage sites will be created

Church of the Holy Mother of God 'Joy of All Who Sorrow'

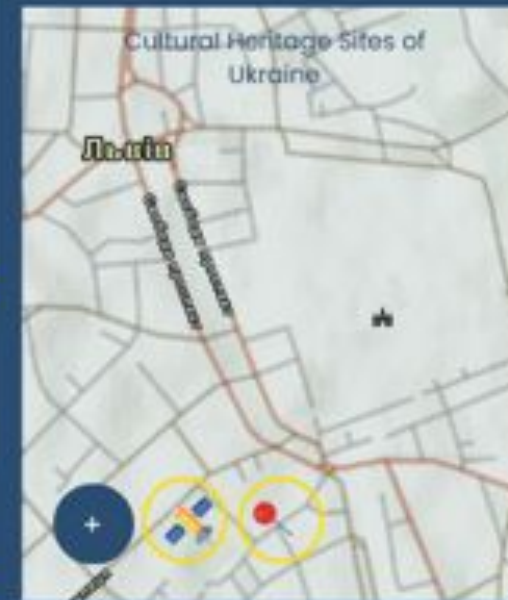
HISTORY

The church's facade is decorated with massive baroque pediments, profiled cornices, and arched windows. Inside, it features an iconostasis made of green Indian marble with gilded latticework. Mosaic compositions adorn both the exterior and interior of the church. In 2008, the ancient icon of the Mother of God 'Joy of All Who Sorrow,' that heralded the construction of the original church, was returned to this site.

GALLERY



LOCATION



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Virtual tour around UNESCO World Heritage sites in Ukraine



EXPLORE

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Virtual Tour



Key Elements:

Digital Preservation - utilizing advanced imaging and mapping technologies to create digital replicas of cultural sites and artifacts

Virtual Museum and Exhibits - a comprehensive online platform featuring 3D models, virtual tours, and interactive content

Augmented Reality (AR) Experience - mobile AR applications that overlay digital information onto real-world environments, enhancing user engagement and education

Educational Outreach - curated educational materials and programs for schools and universities to foster learning and awareness about Ukrainian culture and heritage

Community and Crowdsourcing - features allowing global Ukrainians and other communities to contribute personal stories, photographs, and data

Artist Collaborations - partnerships with artists to create space-inspired Ukrainian art, broadening the cultural conversation.

Data Integration - use of space and geo data to monitor and display the status of heritage sites in real-time

Business Model

Value Propositions:

Cultural Preservation - protect and promote Ukrainian heritage during a time of crisis;

Education - provide unique learning tools and resources that integrate culture with technology and space science;

Engagement - foster a sense of global community by connecting individuals with their heritage and with each other through interactive experiences.

Customer Segments:

Educational Institutions - schools and universities that can integrate the project's resources into their curricula.

Cultural Organizations - museums, libraries, and cultural centers looking for digital solutions to showcase Ukrainian culture.

Ukrainian Diaspora - global Ukrainian communities interested in preserving and interacting with their cultural heritage.

Space Enthusiasts and the General Public - individuals fascinated by the intersection of space technology and cultural preservation.





Business Model

Channels:

Online Platform - the main hub for interaction with the project's offerings;

Social Media - for marketing, community engagement, and content distribution;

Educational Workshops and Seminars - direct engagement with students and educators;

Collaborations - partnerships with NGOs, cultural institutions, and tech companies for broader reach and impact.

Revenue Streams:

Subscription Model - access to premium content in the virtual museum, special educational resources, and advanced AR features;

Grants and Funding - applying for cultural preservation, technology, and education grants provided by governments, international organizations, and private foundations;

Donations and Sponsorships - crowdfunding campaigns and sponsorship deals with corporations interested in CSR activities related to culture, education, and technology.

Merchandising - sale of educational kits, 3D printed models, and art collaborations.



Future steps: key activities

- **platform and content development** - building and regularly updating the digital platform with new content and features;
- **community building and management** - engaging with users, gathering feedback, and encouraging contributions;
- **grant writing and fundraising** - securing financial support for the project's sustainability;
- **marketing and promotion** - raising awareness of the project and its goals.

Scientific Justification:

- ✓ use of NASA Open Data
- ✓ technical implementation
- ✓ educational resources

Fulfilment of Promises:

- ✓ technical implementation
- ✓ cultural integration

Real-world Applicability:

- ✓ global audience
- ✓ educational module
- ✓ tourism and cultural exchange



Our Team

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Web2Learn
Open, social learning



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Baltics4UA project: <https://baltics4ua.eu/>

Thank you!

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