

ImpactXchange

Challenge description



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Table of Contents

Overview

01

02

Challenges

Deliverables

03

04

Team
formation

Overview

The Green Coding Hackathon aims to tackle pressing sustainability challenges by leveraging technology and innovative thinking. You will work on creating green-coded software solutions addressing issues such as the digital divide and cultural dilution. This hackathon is designed to foster interdisciplinary collaboration among students, blending technical skills with insights from sustainability, design, and business.

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Challenges

Digital Divide

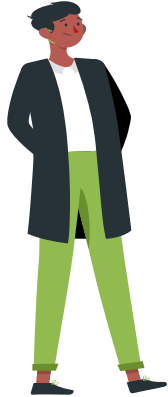
This refers to the gap between individuals who have access to modern information and communication technology (ICT) and those who do not. This disparity can stem from socioeconomic, geographic, or educational differences, leading to unequal opportunities in education, employment, and participation in the digital economy.

Examples:

- Rural vs. Urban Areas: Urban areas often enjoy high-speed internet and abundant digital resources, while rural areas may lack connectivity.
- Socioeconomic Barriers: Low-income families might not afford devices or internet subscriptions, hindering their access to online education and services.

Digital divide: Stories

- Jai, a student from a rural village, struggles to attend online classes due to unstable internet. He often falls behind his urban peers who have uninterrupted access.




- Sara, a single mother in a low-income household, cannot afford a computer, limiting her children's ability to participate in digital learning and her own ability to seek online job opportunities.



Cultural Dilution

Cultural dilution occurs when local traditions, languages, and practices are replaced by dominant global cultures, often due to the pervasive influence of the internet and global media. This can lead to the loss of cultural identity and heritage.

Examples:

- **Language Loss:** Indigenous languages and dialects are at risk as younger generations favor global languages for better economic opportunities.
 - **Traditional Practices:** Local customs and crafts may decline as global trends dominate markets and lifestyles.
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Cultural Dilution: Stories

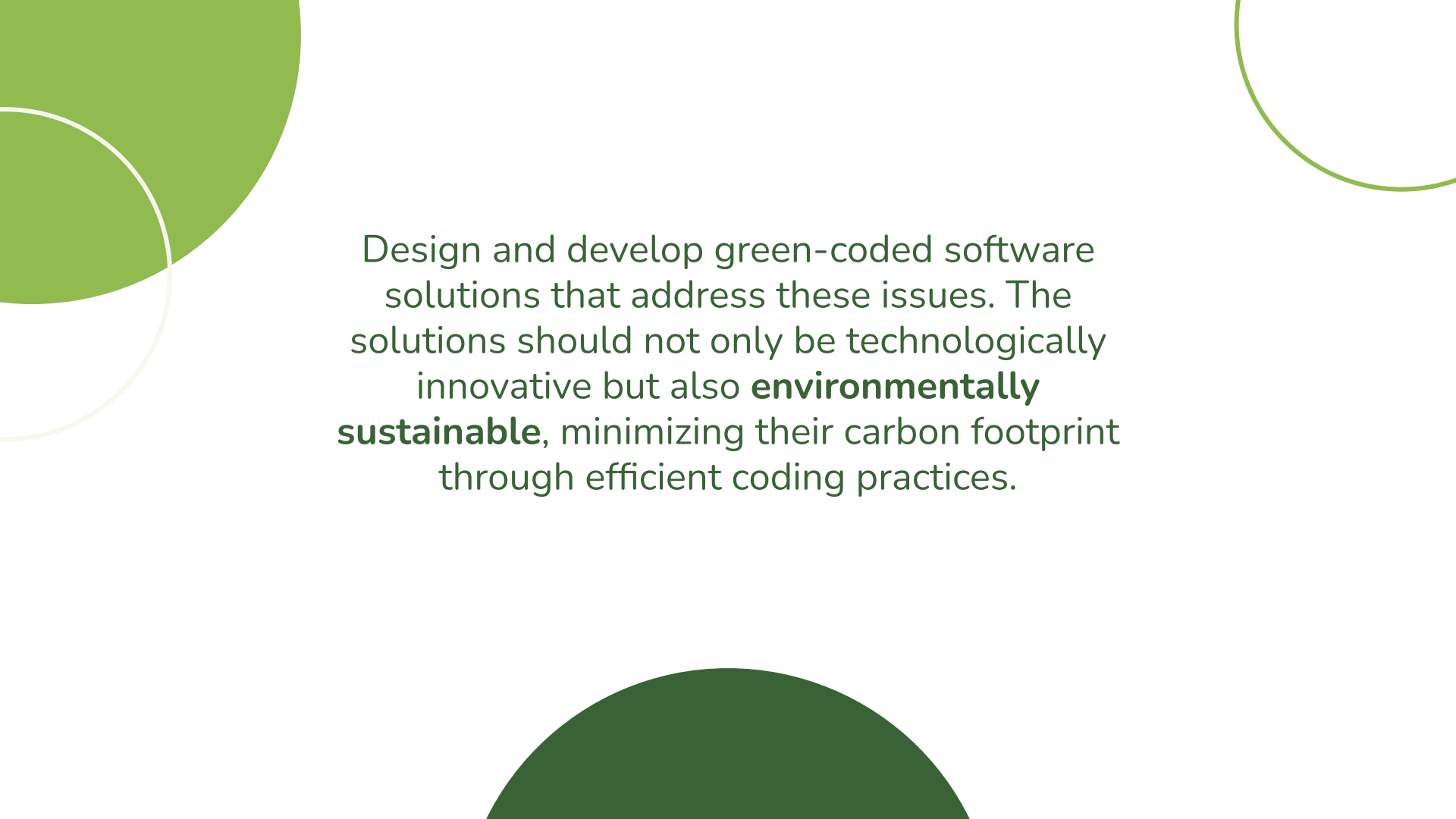
“ Lina, a teenager from a small town, prefers speaking English and watching international shows, slowly losing touch with her native language and local traditions.”



“ Mr. Tan, a traditional craftsman, finds it hard to sustain his business as modern products from global markets flood the local market, reducing demand for his handcrafted items.”

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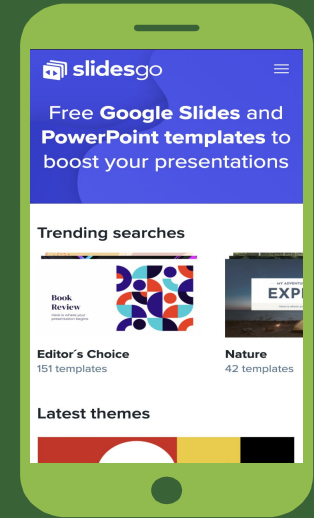
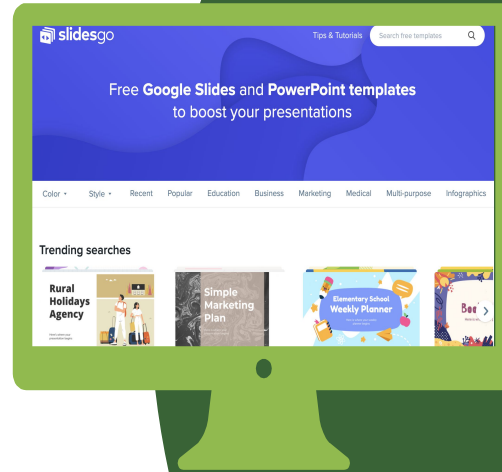
Deliverables

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Design and develop green-coded software solutions that address these issues. The solutions should not only be technologically innovative but also **environmentally sustainable**, minimizing their carbon footprint through efficient coding practices.

Solution

Your product would be hosted on the cloud with a web and a mobile interface, these interfaces could have similar OR complementary functionalities.



Teams

The image features a white background with several abstract green shapes. On the right side, there is a large, dark green, semi-circular shape. In the bottom center, there is a medium-sized, light green circle. On the bottom left, there is a thin, dark green outline of a circle. The word "Teams" is written in a bold, light green, sans-serif font in the upper left quadrant.

The slide features several decorative green circles of varying shades and sizes. A large, solid green circle is in the top-left corner. A thin white circle overlaps its bottom edge. A thin green circle is in the top-right corner. A large, solid dark green circle is at the bottom center.

Forming Teams:

- Each team should consist of 4 students.
- Aim for a mix of skills, we encourage you to have interdisciplinary teams with different backgrounds and perspectives

How to Register:

- Register through our hackathon platform.
- When registering, provide detailed information about your skills, background, and interests in sustainability.