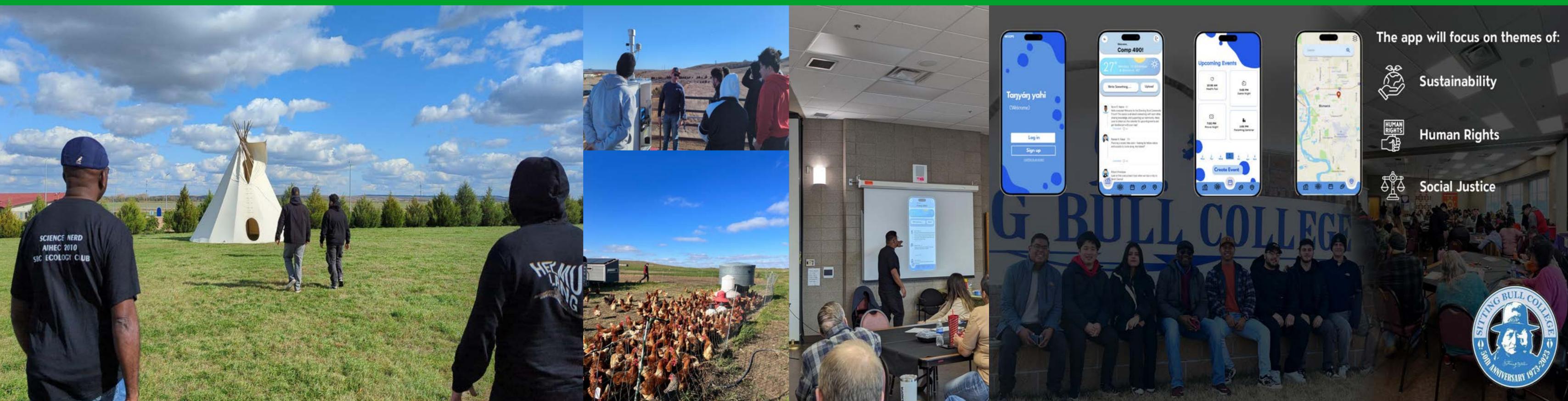


Citizen Science: Building A Mobile App for Standing Rock Sioux Nations





Synopsis

- Develop a mobile app integrating traditional knowledge with NASA and EPA.
- Empower community members in data collection, improve environmental data accuracy, and promote sustainable practices as a model for other Indigenous communities.
- Conduct workshops for community input, collaborate with NASA and EPA, and launch a pilot app with ongoing support and evaluation.

Research Objective

- Feature local organizations and their services to ensure community members are aware of and can access available support.
- Create a dynamic space for residents to connect, share cultural practices, and stay informed about local events, strengthening community ties.
- Empower residents to contribute to environmental monitoring by aggregating data on weather, water, air, and soil quality to enhance local environmental understanding.

Research Approach

- Gather input from community members about their needs and preferences for the app.
- Conduct tests with community members to refine app features and ensure user-friendly navigation.

Research Results and Products

- The Woniya Wichoni team will use human-centered design and ESG principles to collaborate with Dakota-Lakota Nations on culturally sustaining tools.
- A software system will collect and analyze environmental data, providing air quality insights, with all data publicly available.
- A deployable mobile application will showcase this software.

Commercialization and/or Societal Impact Opportunities

- Application: Community engagement mobile application.
- Key Values: A mobile platform that integrates cultural knowledge with environmental data.
- Potential Customers: Members of the Standing Rock Nation.

Team Names & Collaborators

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Citations

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