

Girls in Tech Climate Hackathon | Team 3

# **ClimateRepo Product Requirements Document**

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Product vision:	To build a platform that business school professors, students, and sustainability professionals can use to more easily generate and share content on climate change solutions.
Key Outcomes:	<ul style="list-style-type: none"> <li>• Business school professors are able to easily educate themselves on relevant climate change concepts</li> <li>• Climate solutions implemented at companies move rapidly into business school curricula</li> <li>• MBA students graduate more capable of implementing climate solutions in the private sector</li> <li>• Facilitate increased public access to climate change-related content and promote greater awareness of sustainability</li> </ul>

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## Background

### The Challenge:

From the Columbia Business School Tamer Center:

*“How can we leverage AI to increase teaching of business and climate change at peer business schools across the US and reduce the barriers for faculty to share their open access syllabi, course materials, and cases?”*

## Problem Statement:

- Business schools do not have a centralized platform for sharing climate course materials.
- Business school courses do not integrate climate change solutions into the core curriculum.
- Business school students do not have the opportunity to practice climate change concepts or implement frameworks in a practical way.
- There is a disparity between industry needs of practitioners (e.g. CSOs) and what's being taught in business schools today. MBAs don't graduate with a "climate toolkit".
- Business school professors, while they may be very knowledgeable in their discipline, are not necessarily climate leaders nor do they stay abreast of climate change solutions and topics to integrate into their courses. Professors working on climate change may be siloed or in a different department – information isn't shared well across universities.

## Stakeholders:

<u>Stakeholder</u>	<u>Needs</u>	<u>Considerations</u>
<b>Professors</b>	<ul style="list-style-type: none"> <li>• Need a solution that helps them to easily find climate case material</li> <li>• Need a community with which to engage in peer to peer learning (e.g an accounting professor at CBS may want to connect with an accounting professor at Wharton to discuss how to teach carbon accounting for financial disclosures)</li> <li>• Need a simpler, less time-expensive, way to share climate insights they might have.</li> </ul>	<ul style="list-style-type: none"> <li>• The leading thinkers on climate and business often teach at leading business schools (e.g. Bruce Usher at CBS); however, it's very hard for these professors (who are relatively few) to educate all of their peer professors across all disciplines.</li> <li>• Professors may not be practitioners; they may be accustomed to teaching old material</li> <li>• Professors like to teach from cases</li> <li>• Today, professors are sharing information on course design and climate mostly through traditional word of mouth (e.g. phone calls)</li> </ul>
<b>Students</b>	<ul style="list-style-type: none"> <li>• Need to have climate change content "force-fed" to them via the core (for those students who DON'T self-select into climate and business courses)</li> <li>• Need to be more informed about climate-related events in their vicinity</li> </ul>	<ul style="list-style-type: none"> <li>• Most business school students come into business school without a background in climate and though many seek out climate and business courses, they see this as a distinct area of study.</li> <li>• Students are relatively organized and generating tons of climate and business content and resources already via school-specific clubs (e.g. CBS Green Business Club). These resources tend to live in Slack, Google Drive, Air Table.</li> <li>• Students are organizing conferences and speaker-events on climate and business at almost all leading business schools. Students do attend events at other business schools.</li> <li>• Some students come to campus with relevant work experience at the intersection of climate and business, but there are few systematic ways for them to share this knowledge with their peers.</li> </ul>
<b>Corporate Sustainability Leaders</b>	<ul style="list-style-type: none"> <li>• Need to recruit talented students with a strong awareness of sustainability principles</li> <li>• Need to disseminate their latest news and events to the public in order to enhance their reputation</li> </ul>	<ul style="list-style-type: none"> <li>• Sustainability leaders are busy and don't always have the time to sit for a full case study interview process. Even if they do, the content they share may be outdated by the time the case is complete and published.</li> </ul>

## Market Assessment:

- Business school case access today is
  - Limited to authorized professors at each respective school (a limitation we considered a requirement for our platform design)
- Climate Change professional education
  - Leading organizations who offer online education, fellowships, etc (and may be potential platform partners or whom business schools could pay for content libraries to train the AI)
    - Terra.do
    - Climatebase
    - One Point Five
    - Work on Climate
    - Climate Tech VC

## Goals

1. Centralize Case Repositories:
  - Create a user-friendly platform that centralizes business school case repositories, making it easy for professors to access a diverse range of case studies.
  - Improve search and categorization features to streamline case selection, helping educators find relevant materials quickly.
2. Promote Sustainability Education:
  - Facilitate the integration of climate and sustainability-focused case studies into business school curricula, enhancing students' understanding of real-world challenges.
  - Provide resources and support for professors to effectively teach climate-related topics in the classroom.
  - Gather feedback from students to continually enhance the cases and provide professors with improved guidance in selecting cases for classroom use.
3. Raise Awareness:
  - Create a dedicated section for climate-related events and news, serving as a hub for information on sustainability, climate change, and related initiatives.
  - Enable public contributions of events and news to foster community engagement.

## User Stories /Journey Maps

- As a professor in business school, I want to know what other business schools are teaching and what resources they have available, so that I can leverage their resources into my curriculum
- As a professor in business school, I want to teach climate change in a standardized way so that my students can develop a common lexicon to leverage in their post-MBA career
- As a professor in business school, I want to get up to date information on climate change and connect with experts so that I can pass on relevant information to my students
- As a professor, I want to see recommendations for organizations or companies working on climate change solutions so that I can connect my students with practical opportunities to implement the solutions they are learning in my course
- As a business school administrator, I want to be able to collect data longitudinally and to see the impact of my climate change curriculum over time so that I can continue to build and invest in my climate change programming
- As a student in business school, I want to find the resources that are most helpful to my study of climate change, so that I can use my time effectively
- As a professor in business school, I want to know what my students think about the cases

## Requirements

### MVP Scope - What does our Application do?

ClimateRepo is an interactive platform with the following components:

1. An **AI-enabled search engine** that prioritizes climate-related cases
  - The AI will parse existing case libraries and make recommendations for cases that relate to the following climate and business topics:
    - 1.) Physical asset risk
    - 2.) Carbon accounting and reporting
    - 3.) supply chain decarbonization
    - 4.) Renewable energy
    - 5.) Carbon pricing
    - 6.) Regulatory environment
  - Furthermore, cases will be tagged based on traditional business school academic departments (e.g. Accounting, Finance)
  - Users should be able to type a query into the search bar and be presented with cases that specifically contain key words from the search AND climate change concepts
2. **Suggested Cases** which are highlighted in a carousel or similar featured design
  - On the main landing page of ClimateRepo, cases should be highlighted based on:
    - Student “upvotes”
    - Relevance (based on the specific user’s profile or previous interests on the platform)
    - Popularity or frequency of downloads by peer professors

### 3. **Events** which are highlighted in a carousel or similar featured design

- Event data is contributed by clubs, students, and

Professors, students, and climate and business practitioners should be able to make differentiated account types.

- Role-based permissions that –
  - Grant professors the ability to view and download cases
  - Grant ‘open contributors’ (students, sustainability professionals, etc) the ability to upload content that can be leveraged by the AI model

### Future State

Using contributions to the platform from ‘open contributors’, the AI can scrape relevant climate information and add it to “legacy” cases so that all cases have key climate concepts embedded in them.

### Key Metrics

- # of professor weekly users
- # of students reached
- # of cases identified to have climate themes
- # of cases to be augmented with climate data
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