

Recyclopedica App

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Project Origin

- Enrolled in BU's Cross College Challenge, XC 433 (Zero Waste Module)
 - The idea: a platform to improve student recycling behavior
 - All three of us found the idea quite exciting and decided to work as a team
- After working on the project throughout the semester, we pitched the idea of transforming the Recyclopedia resource (which already exists in website form) into an app
 - Concept behind this was to improve student confidence about recycling
 - **The app will allow users to scan or search an item and find out whether or not it is recyclable**
- Worked on this project and after our final presentation, we were funded by BU Campus Climate Lab to help create the application



Background Research

- Conducted **survey** of the BU student body to confirm there is a problem with recycling knowledge and confidence
 - **90** respondents, **96.7%** recycle at least sometimes
 - Only **3.3%** are “extremely comfortable” in their knowledge recyclable
 - **11.1%** believe BU has sufficiently educated them about recycling
 - **77.8%** say that an app would help them recycle more accurately
- Ran an experiment on **fourteen** BU students to see if the Recyclopedia resource improves this problem
 - Asked students to sort **six** common waste objects
 - Half had access to Recyclopedia, half did not
 - Recyclopedia improved sorting accuracy by **22%** (66.6% vs. 88.6%)
 - Recyclopedia improved self reported recycling confidence scores by **1.8 points** (7.1 out of 10 vs. 8.9 out of 10)



of what is

App Development Research

- **Inside of Boston University**
 - Sustainability@BU
 - BU Spark
 - Helps students create apps
 - BU SAIL
 - Software & Application Innovation Lab
- **Outside of Boston University**
 - Jake Aronskind
 - Independent app developer
 - Recollect
 - Private sector app developer



Two Viable Options:

Recollect

- Recollect, a private company that makes recycling apps and websites for universities
- Estimate for this kind of project: \$4,230
- **Fast and professional, BUT not student-led**

BU Spark

- BU Spark X-Lab UXD Client to further develop the idea
- Then, BU Spark Software Engineering Practicum takes it from there
- **Student-led, BUT could take more time**



Outcome and Next Steps

- After going through the application process with BU Spark, we recently found out we will be a “client” in the UXD (user experience design) Program this semester!
 - Student software developers at Spark will be moving forward with our project idea
 - We will meet with our developers, keep track of the progress made on the project, and consult with them about the design and functionality of the app
 - We will share our CCL and XCC research with the development team



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Thank You!

Feel free to reach out with any questions!

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