Récy&Co

Sorting is fun !

Recy&Co (RecyandCo.fr), sorting is fun! is an educational and entertaining web project, designed to raise awareness among children and families about selective sorting. It takes the form of an interactive website including local sorting instructions, a "Where to throw?" search engine, and a drag & drop game with a mascot, Recy the raccoon.

Developed with an eco-design approach (lightweight design, responsive, offline access), this project aims to make sorting simpler, more fun, and more accessible.

Intended to be shared with the inhabitants of the Communauté de Communes d'Évron, this project aspires to become a local, free, and evolving educational tool.

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SCHOOL

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0. Project Objectives

Project Purpose:
Récy&Co is an educational and playful website designed to raise awareness among children and families about waste sorting. The project exists to make learning about recycling simpler, more fun, and more accessible, while following eco-design principles. It addresses a local need by providing a free educational tool that supports ecological transition and complements existing awareness campaigns in the community.

MVP Objectives:
Provide an interactive interface allowing users to easily consult local recycling guidelines.
Integrate a drag & drop mini-game with the mascot Récy to make recycling fun and educational for children.
Implement a "Where to throw it?" search engine to guide families in sorting their everyday waste.

1. Stakeholders and Roles

Category	Stakeholder	Role / Responsibilities
Internal	Samira Roche (myself)	- Project Manager: planning, tracking, and organizing work.- Front-End Developer: building the user interface with HTML, CSS, JavaScript.- Back-End Developer: server logic and database integration with MySQL.- UX/UI Designer: designing the user experience while following eco-design principles.
External	Holberton School Instructors	Pedagogical tutors: provide technical guidance, feedback, and validate deliverables.
External	End Users (families, children, residents of Évron)	Direct beneficiaries: use the site to learn and practice recycling in a fun way.
External	Commune of Évron	Potential partner: can promote and integrate the tool into its recycling awareness initiatives.

2. Project Scope

In-Scope (included in the MVP):
Interactive website built with HTML, CSS, JavaScript, and Python (Flask).
MySQL database to manage users (registration, login, scores, badges).

Main pages:

Home
Local recycling guidelines (JSON)
"Where to throw it?" search engine
Recycling drag & drop game
User space (registration/login)
About / Eco-design page
Integration of mascot Récy the raccoon to make the site playful.
Following eco-design principles (lightweight, responsive, optimized site).

Out-of-Scope (excluded from the MVP):

Bonus shop and virtual currency system (planned as a future enhancement).
Advanced personalization features (avatars, advanced themes).
Integration with national databases (project remains focused on Évron and local recycling rules).
Multilingual translation (MVP will only be in French).

3. Risks and Mitigation Strategies

Risk	Mitigation Strategy
Technical difficulties with Python / MySQL integration	Allocate time for research, use official documentation and tutorials, seek support from instructors if needed.
Loss of time on secondary features	Focus strictly on MVP (game, recycling info, search engine), postpone extras for later.
JSON/MySQL database incomplete or errors in recycling guidelines	Start with a small, verified dataset and test simple cases before expanding.
Performance or heavy site issues (ecological and UX impact)	Optimize images (WebP), minify CSS/JS, test responsiveness early, remain consistent with eco-design.
Risk of falling behind schedule	Follow a clear weekly roadmap (4-week plan), adjust priorities when blocked.
Dependency on external data (API ipapi.co for location)	Provide fallback mode (site usable without external API), add manual input for postal code.

4. High-Level Plan

Main Stages

Stage 1: Idea Development (completed)
Defined the concept of Récy&Co: an educational and fun website about recycling.
Identified the target audience (families, children, Évron community).

Stage 2: Project Charter Development (current)
Writing objectives, roles, scope, risks.
Validating the project framework.

Stage 3: Technical Documentation (upcoming)
Define technical architecture (Front-end, Back-end, MySQL).
Specify MVP functionalities.
Highlight eco-design principles.

Stage 4: MVP Development (main phase)
　　　Week 1: Basic HTML/CSS structure.

Week 2: Integration of JSON data (recycling info, search engine "Where to throw it?").

Week 3: Development of drag & drop game + user space (login/registration via MySQL).

Week 4: Mascot integration + eco-design optimizations + About page.

Stage 5: Project Closure

Final tests and MVP validation.

Final user and technical documentation.

Presentation and defense.