Eternity Calculator

Project Organization & Summary

Team I

COMP 354 - Summer 2021

June 11, 2021

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Initial Project Meeting

- Decision of the technology and language for Eternity

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- Breakdown of team members' skills, tasks and responsibilities

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- Decision of the technology and language for Eternity
- Breakdown of team members' skills, tasks and responsibilities
- Organization of future meetings and communication
  - Discord

Project Breakdown

- Leader - Project and repository organizer
- Documentation
- Full-stack Developer
- Back-end Developer
- Front-end Developer
- Communication and resources

Roles

Leader: Robert

Documentation: Xavier, Sobhan

Full-stack Developer: Chelsie

Back-end Developer: Elijah

Front-end Developer: Michael

Communication and resources: Hao Mei

Major presenter: Michael

Minor presenter: Robert

GitHub Repository

More than a code hosting platform for version control:

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- Issue tracking

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- Kanban board linked to current issues

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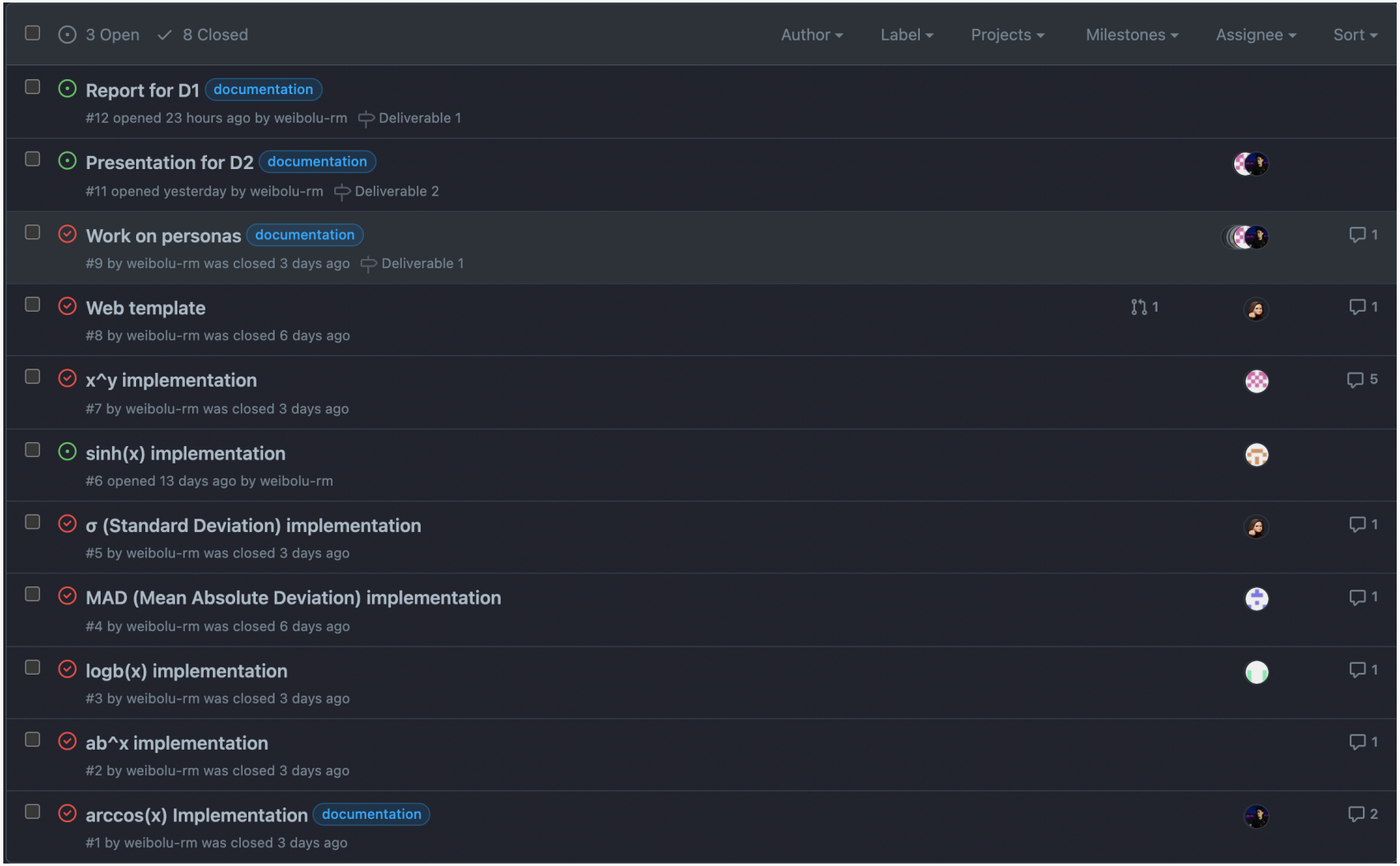
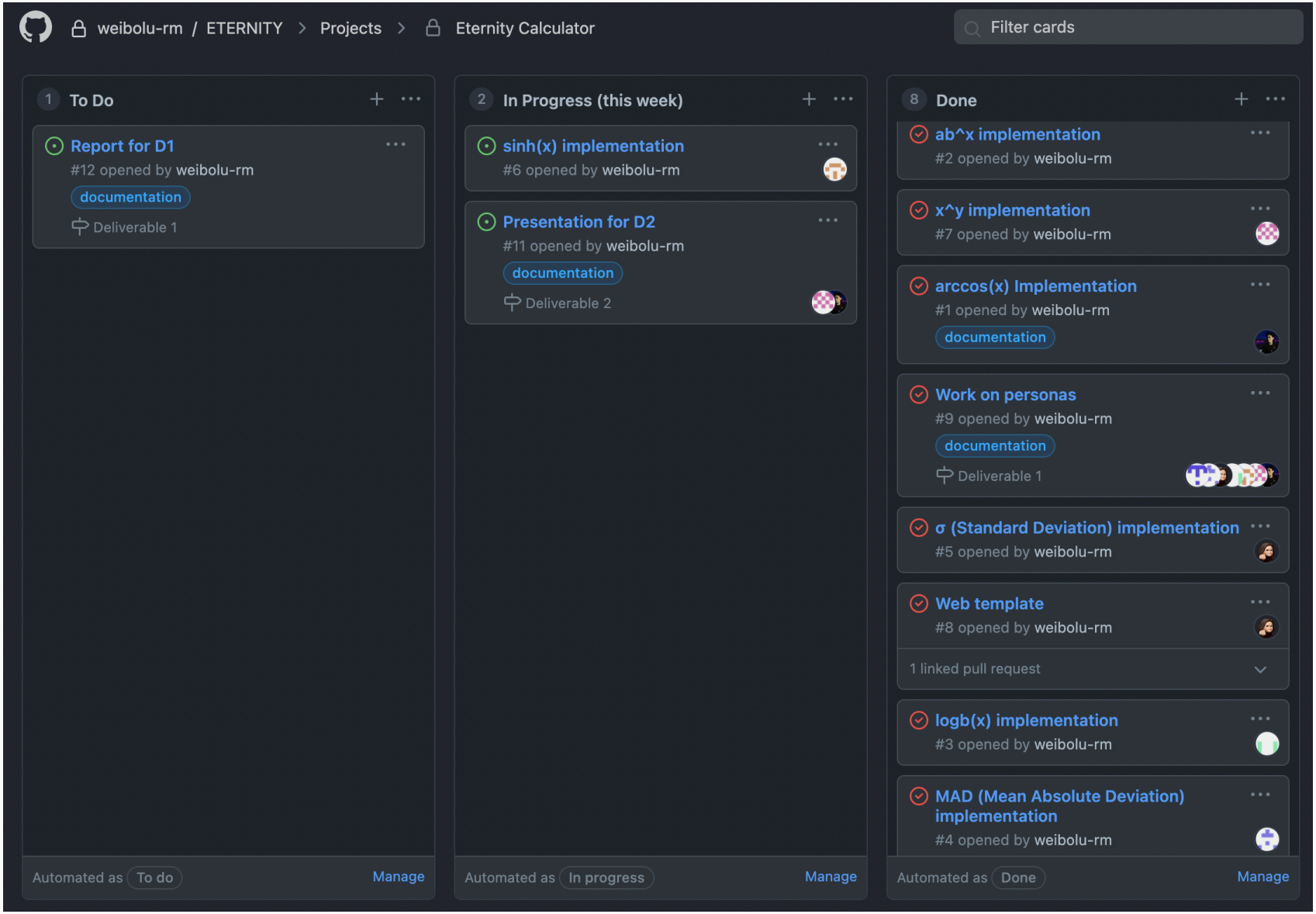
- Documentation - wiki

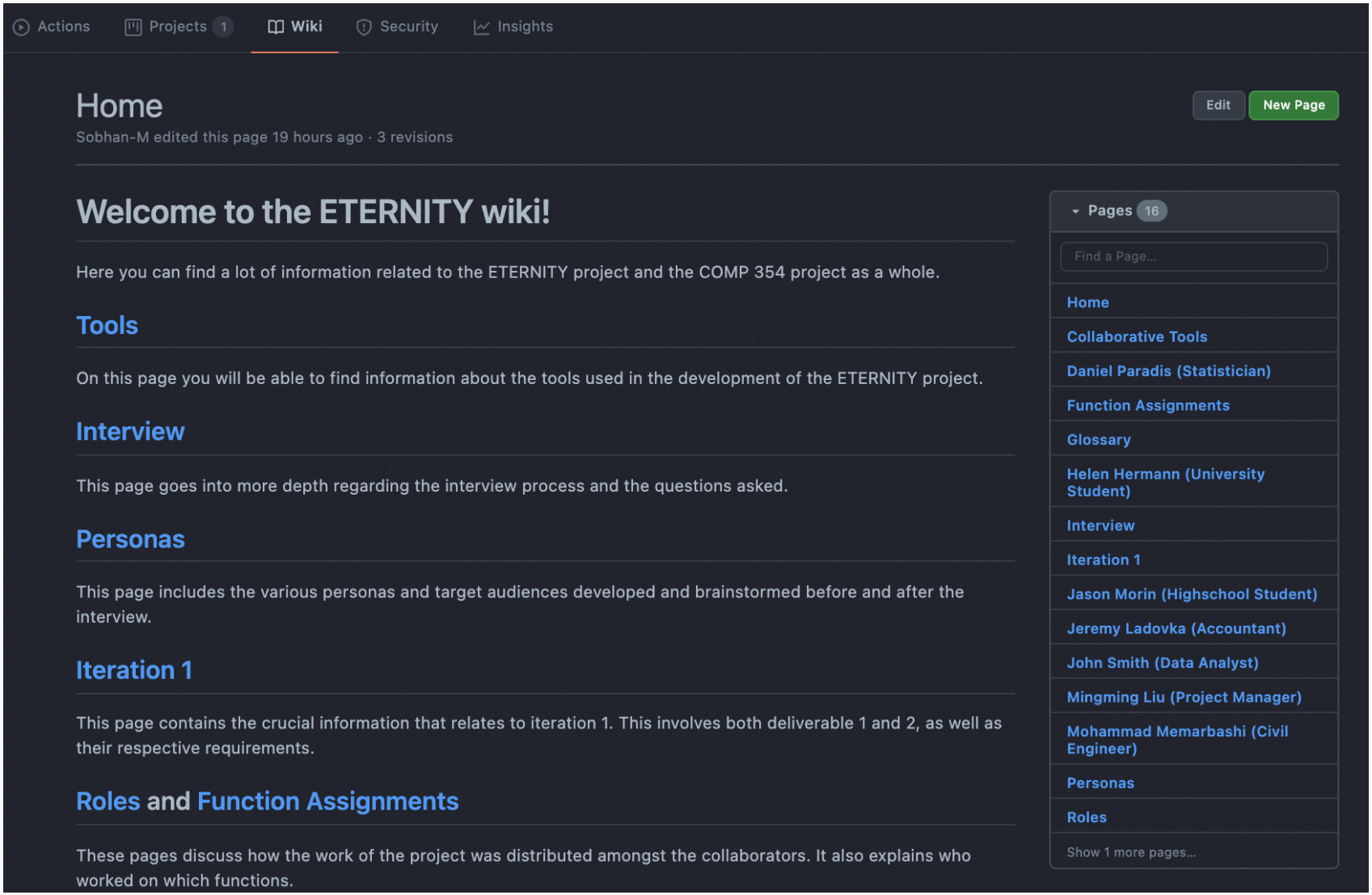
GitHub Issues



Kanban Board



Wiki


Actions
Projects 1
Wiki
Security
Insights
Home
Edit
New Page
Sobhan-M edited this page 19 hours ago · 3 revisions
Welcome to the ETERNITY wiki!
Here you can find a lot of information related to the ETERNITY project and the COMP 354 project as a whole.
Tools
On this page you will be able to find information about the tools used in the development of the ETERNITY project.
Interview
This page goes into more depth regarding the interview process and the questions asked.
Personas
This page includes the various personas and target audiences developed and brainstormed before and after the interview.
Iteration 1
This page contains the crucial information that relates to iteration 1. This involves both deliverable 1 and 2, as well as their respective requirements.
Roles and Function Assignments
These pages discuss how the work of the project was distributed amongst the collaborators. It also explains who worked on which functions.
Pages 16
Find a Page...
Home
Collaborative Tools
Daniel Paradis (Statistician)
Function Assignments
Glossary
Helen Hermann (University Student)
Interview
Iteration 1
Jason Morin (Highschool Student)
Jeremy Ladovka (Accountant)
John Smith (Data Analyst)
Mingming Liu (Project Manager)
Mohammad Memarbashi (Civil Engineer)
Personas
Roles
Show 1 more pages...

Interview Process

- Funnel Strategy
  - General questions leading into more specific questions related to the calculator.

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- Semi-structured & Linear Progression
  - Asked some follow-up sub-questions based on the response to get more information
  - General questions to increasingly more specific questions (Funnel Strategy)

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- Funnel Strategy
  - General questions leading into more specific questions related to the calculator.
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  - General questions to increasingly more specific questions (Funnel Strategy)
- 5 questions per team member
  - 10 General questions
  - 25 Specific questions

Choosing Interviewees

- Aimed for a variety of interviewees based on whom we thought would be interested in using a calculator

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- Total of 7 interviewees, one interview conducted by each team member

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- Customizability
- Preference of formal notation
  i.e. x^y *vs* *x^y*
- Existence of few popular online calculators/ tools with advanced features
  i.e. *WolframAlpha, Symbolab, Desmos*

Example of a discarded idea

Which functions that are generally not on a calculator, would you like to see added?

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Which functions that are generally not on a calculator, would you like to see added?

”This is very difficult, maybe some constants could be added, like the gravity constant or the speed of light for our fellow engineers.”

Initial Personas

People ranging from different backgrounds who might contribute to different types of use cases:

1. Students
2. Statisticians
3. Data Analysts
4. Businessmen
5. Accountants
6. Engineers
7. Professors

Actual Target Personas

1. High-school Student
2. University Student
3. Statistician
4. Data Analyst
5. Accountant
6. Engineer (Program Manager)
7. Civil Engineer

Personas Overview

Using the interview responses:

Personas Overview

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- Wrote up a basic bio to make it more ”real”

Personas Overview

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Personas Overview

Using the interview responses:

- Wrote up a basic bio to make it more ”real”
- Came up with positive and negative personas
- Built a table with important information

High-school Student

Name	Jason Morin
Gender and Age	Male, 15
Disabilities and restrictions	None
Education	Current high-school student
Profession	Student
Hobbies	Building (customizing) computers, video games, watching Netflix
Location of use	Home
Computer literacy	Very comfortable using computers, and a fast learner for new programs/ tools but not a power user.
Computer environment	*Google Chrome 91.0.4472.77* on *Windows 10*
Internet literacy	High, self-taught and fast learner

Accountant

Name	Jeremy Ladovka
Gender and Age	Male, 38
Disabilities and restrictions	None
Education	Masters, Accountancy
Profession	Accountant
Hobbies	Math, soccer, watching movies, playing video games, going out with friends
Location of use	Office/Home(COVID-19)
Computer literacy	Very strong computer skills Uses computers on a daily basis to perform both work related tasks and personal hobbies.
Computer environment	*Google Chrome 91.0.4472.77* *Safari v14.1, Mac OS*
Internet literacy	High, communicates via Internet daily

Use Cases

High Level	Low Level
Validate Calculations Of other Software	Input Data Set
Solve School Assignments	Input Number
Analyze Sale Statistics	Input Function
Estimate Cost Of Engineering Projects	Input Operator
Calculate Shopping Expenditures	Graph Function
Help During Exams	Calculate Result
Analyze Biology Lab Results	Display Result.
Graph Mathematical Functions	Clear Result.
Analyze Large Data Sets	Modify Result
Design Building Architecture	

Prototype

Eternity Calculator

			9*2
AC	arccos(x)	sinh(x)	$\log_b(x)$
MAD	σ(x)	ab^x	x^y
7	8	9	÷
4	5	6	×
1	2	3	−
•	0	=	+

Thank you!