Metronome

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# Feasibility Study

I would like to make a metronome. It is a thing that ticks and is used by musicians to stay in time. Going to make it web based. The main calculation is converting a BPM to the delay between each beat. This I computationally simple.

The budget limit is 0 and we have 2 weeks.

# Analysis

Stakeholders

Matt is a 17 year old boy who would like to become a pianist but has trouble staying in time. He has very little money so cannot afford a physical metronome. He has access to the internet through an old laptop.

Research

# Essential Features

Set BPM

Start/Stop

Any web enabled device

# Limitations

There is limited time to add some of the additional features

There will be no musical analysis or play analysis

# Success criteria

|  |  |  |
| --- | --- | --- |
| 1 | Must be accessible on any device connected to the internet | The stakeholder has an old laptop |
| 2 | User can set BPM | Practice at different speeds |
| 3 | Autocorrect to valid data | They want to focus on drumming and might accidentally type the wrong thing |
| 4 | Increase and decrease the BPM | Different speeds needed |
| 5 t | Toggle start and stop | Really simple ui |
| 6 | Audible click | Wants to drum along a to a click sound in headphones |
| 7 | Visual Cue, indication showing whenever it would tick | Sometimes the metronome would be used with the sound turned off. |

# Design

# Algorithms

BPM = user input

Interval = 60000/BPM

The user should be able to enter the bpm score the browser needs to know how long to pause between each tick in milliseconds.

# Usability Features

Graphical user interface

Description automatically generated

# Implementation

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# Testing

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# Installation

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