ClamClock – Electronics & Design | 2016   www.clamclock.com   Travis Libsack

Objectives

Design and manufacture an electronics kit to teach middle schoolers how to solder & program
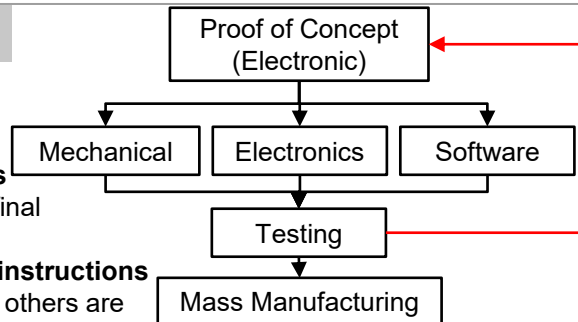
Complete a **fully funded** Kickstarter campaign through successful marketing

Specifications
- Hand solderable with through-hole components to teach soldering
- Compatible with Arduino to teach programming to kids
- Design instructions and kit for that was understandable enough to ship around to world to funders

Proof of Concept

Meticulously **designed** and **tested** each version PCB, improving it each time

Collaborated with the programming and mechanical team to design the clock with the correct physical dimensions and system architecture

Approach

- Split into 3 teams after working on the proof of concept
- Iterated testing **3 times** until we arrived at the final product
- Completed **assembly instructions** in the testing phase so others are able to re-produce and use our kits
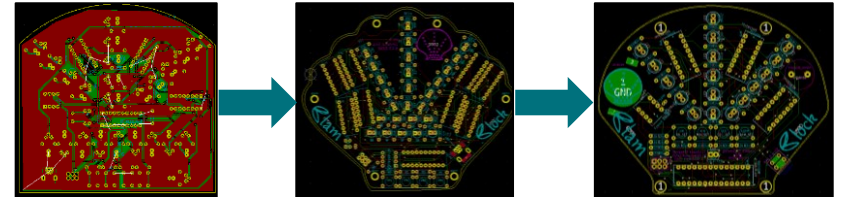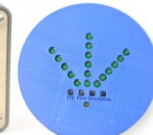
Instructables:
- https://www.instructables.com/id/ClamClock-a-Binary-Timekeeper/

Proof of Concept (Electronic) → Mechanical | Electronics | Software → Testing → Mass Manufacturing

Results

Fully **funded** Kickstarter, reaching 51 people and $3,108 in funding
- https://www.kickstarter.com/projects/1773610279/clamclock-a-diy-binary-timekeeper

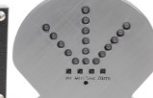Completely **marketed** product including photos and promotional video

Wooden Case   Wall Hanging Case

Industrial Case   Clam Case