



NOVA SCHOOL OF
SCIENCE & TECHNOLOGY

Interação Pessoa-Máquina

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Troca Tintas

Stage 1: Project proposal



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Problem Description

Currently, miniature painters, especially those involved in tabletop wargames like Warhammer, struggle with selecting and comparing paints and inks from various brands. The few websites or applications available only offer options limited to specific brands (usually theirs), and even these platforms are seldomly good at helping users figure out what paints they want. The interfaces are often hard to navigate, lacking any personalization options to make the paint picking process easier for users. This makes it particularly difficult for new hobbyists, who frequently end up purchasing incorrect colors or paints they will not use, ultimately wasting time and money.

Target Users

The target users for this system are miniature painters, with a primary focus on those who participate in games like Warhammer. However, the platform can be easily scaled for users involved in other tabletop games that require personalized miniatures, such as Dungeons & Dragons (D&D) and regular model building. The user base includes both beginners and seasoned painters who are looking for an easier and more streamlined way to compare paints, plan their painting projects, and make purchasing decisions.

Project Goal

The proposed system would:

- Be able to compare similar paints from across varied brands, allowing user review and commentary;
- Allow the user to browse painting schemes based on examples of miniatures available online.
- Have a tool built in that makes suggestions on paints based on the selected picture of a model;
- View 3D models that can be rotated and digitally painted with chosen colors.
- Create a color planer, that outputs a list for the user to have an easier time buying paints.

Competing Applications

There are some websites and apps that address some of these issues, but none that look to be a centralized solution for user ease of use.

An example for a color comparer for varied brands is [here](#) however, there are some severe design flaws with it, but this is the only place available that properly compares the colors across varied brands, but the chart's interface is difficult to navigate and lacks proper formatting, which makes it visually overwhelming. The conversions are often outdated or inaccurate, leading to confusion. Additionally, it does not offer any tools for creating personalized color lists or shopping lists or allow for users to give feedback to some paint equivalence, which we hope to fix with our own version.

[Here](#) is an example for models with color examples. This app is a much stronger contender as it provides an easy-to-use color picker tool for Citadel's paint range and has a modern design that is simple to navigate on mobile devices, with features like inventory and a Wishlist, but it has some issues, nonetheless. The app is limited to Citadel's paints (the most expensive ones usually) and does not offer support for other brands, which makes it less useful for painters who use multiple manufacturers. It also lacks the ability to visualize paints on 3D models, and users cannot create or share custom color plans.