PROJECT MEDICI
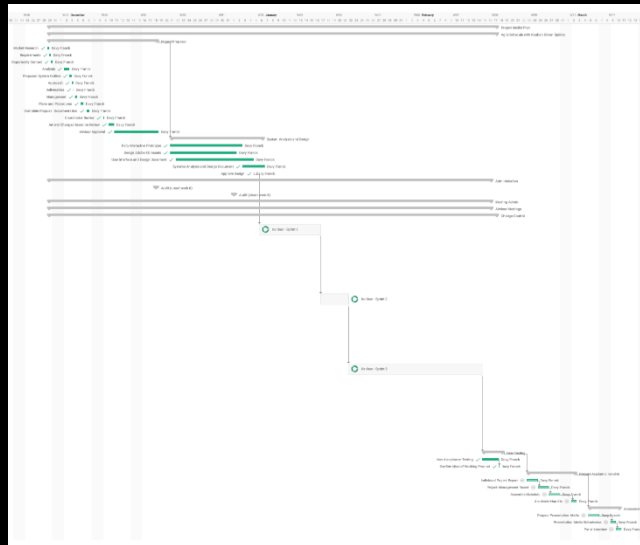
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Medici Paint Companion Launch Menu

Project Medici Project Plan

Medici Paint Companion Paint Summary Screen

INTRODUCTION

Project Medici was initiated in November 2019 to design and develop the *Medici Paint Companion*, an Android mobile application that would serve beginner, intermediate and professional painters alike. The system would be intelligent enough to identify colours from the real world and provide the closest matching paints to those colours.

Additionally, the system would have a comprehensive paint catalogue containing hundreds of paints across leading manufacturers. Users would be able to access each paint in a professional paint summary screen and view interesting information pertaining to that paint's history, colour properties and provenance, as well as helpful tips on how to use them.

Moreover, the system would be driven by colour theory principles, allowing users to generate and view complementary, triadic and tetradic colour schemes for each and every paint.

The objective of *Project Medici* was to technologise the business of creativity, establish a foothold in an observed gap in the market and develop a product that would prove invaluable to painters.

DEVELOPMENT

Project Medici was developed using a hybrid combination of Agile and Kanban driven sprints.

A preliminary analysis and design effort would occur between 21/12/2019 and 6/1/2020. This included systems analysis and design for some of the more complex tasks in the project's backlog, as well as the development of a fully working prototype. For the rest of the project, analysis and design would occur in parallel with development.

Sprint 1: Commenced on 6/1/2020 and completed on 16/1/2020, this sprint involved the integration of the Android Camera API and the development of the inbuilt *Medici*

Camera. The *Medici Camera* would be capable of identifying the RGB value of colours from the real world and convert them into hexadecimal colour codes.

Sprint 2: Commenced on 17/1/2020 and completed on 21/1/2020, this sprint involved the integration of colour theory principles into the *Medici Paint Companion*. This required the development of algorithms to find complementary, triadic and tetradic colour schemes using the identified colours from the *Medici Camera* as well as methods to convert hexadecimal colours into the HSV colour space.

Sprint 3: Commenced on 22/1/2020 and completed on 11/2/2020, this sprint involved the completion of the final development tasks of *Project Medici*. Notably, the development of the *Medici Paint Catalogue* and the CSV Data Repository that would store the paint data. The latter required the research into, and collation of, hundreds of paints across leading manufacturers.

Additionally, work was spent creating a dynamic *Paint Summary* screen that would display a host of information pertaining to selected paints.

Lastly, this sprint involved the development of the paint identifier algorithm that would determine which paints were closest to users' identified colours.

CONCLUSION

The project successfully drew to a close on 17/2/2020 with all original requirements met, sans the *Paint Mix Recorder* and *Paint Inventory & Wishlist Manager* features, which had been removed from the scope.

Despite being an immensely challenging endeavour, the experience was hugely rewarding and saw not only the creation of the *Medici Paint Companion*, but also the acquisition of a range of new skills and understandings; understandings, not just on software development and project management, but broader insights into personal management and self-improvement.