

Pen for the Needle, Line for the Ink

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Abstract: *Embroidery is a traditional Chinese handicraft with a long history and profound national culture. It has also been widely welcomed and respected on the historical stage and attracted the attention of numerous foreign friends. Through the construction of the platform, people will have a better understanding of the embroidery culture, so that China's traditional embroidery can be inherited. By allowing people to design customized embroidery online, traditional embroidery culture can be integrated with the new era, creating a blueprint for the development of new embroidery structures. So that our excellent traditional handicrafts from being lost, under the impact of the modern flood of new art, new craft, traditional embroidery craft can keep its simple beauty.*

Keywords: *Embroidery, Inheritance, Database, Online Service Platform*

1. Introduction

Embroidery is the general name of various decorative patterns embroidered on fabric by needle and thread. Embroidery is divided into silk embroidery and feather embroidery. It is a decorative fabric that punctures silk thread or other fiber and yarn with a certain pattern and color on the show material with embroidery trace. It is the art of using needle and thread to add human design and making to any fabric that exists. [6]Embroidery is one of the traditional Chinese folk handicrafts with a history of at least two to three thousand years in China.

However, times are changing, and the development of modern science and technology and economic forms make embroidery, a traditional handicraft, face new problems of survival. The traditional culture of traditional embroidery is under attack, especially the attack of market economy, which makes the traditional embroidery culture go to the edge of danger.[7] Whether traditional national culture can be protected and developed is an unknown question. Currently, embroidery products have deviated from the tradition, and the development of traditional embroidery technology is gradually going into desolation. With the development of modern science and technology, machine technology has replaced manual technology, and traditional embroidery crafts are gradually decreasing.

2. Project Background and Significance

Modern people lack the endurance and interest to learn embroidery, and modern young people are more influenced by various fashion cultures and foreign cultures, which attract most young people, while embroidery, a traditional cultural craft, has been put aside. They don't have time to pay attention to the charm of traditional embroidery art, which makes the number of talents engaged in this industry continue to decrease, and the inheritance and development of traditional embroidery art are worried. Machine embroidery replaced hand embroidery. Traditional embroidery is done by hand, however, the manual process is complicated, time-consuming and laborious, it requires people to have enough patience, with the birth of embroidery machine, machine embroidery replaced hand embroidery. Although this is the liberation of manpower in a sense, the traditional cultural arts are gradually depleted, such as seed embroidery, gold embroidery, silk drawing technology and so on, which cannot be used in depth. Machine embroidery makes the artistic tradition of embroidery gradually fade.

If traditional embroidery art wants to survive smoothly, be understood, and accepted by most people, it must have the development spirit of keeping pace with The Times, constantly develop and innovate, and can be integrated with the development of The Times. On the one hand, embroidery handwork

should develop and innovate in practical function and aesthetic art, constantly explore new function, and value, and reflect its economic value. [1]On the other hand, its inherent cultural charm and spiritual connotation can be demonstrated and inherited, to show the national characteristics and increase the economic value of cultural creativity.

3. Research Methods

- 1) Carry out field analysis of embroidery market, including market analysis, technical analysis, capital analysis, etc.
- 2) Conduct online and offline questionnaire survey and conduct sample survey nationwide to provide with more comprehensive services.
- 3) Thematic discussions on embroidery culture.

4. Key Problems to be Solved

Present situation of this project is to combine the contemporary embroidery culture inheritance and development to adapt to the new era transformation, embroidery culture and people's needs for the development of the Internet platform, by the embroidery creative and customized business functions, users can choose to use different models according to their demands, to realize the convenience and service of online embroidery design, and realize the biggest attempt of the transformation of embroidery culture to the new era, so that users can fully understand the beauty of embroidery culture, and realize the online service system that users are satisfied with and willing to use.[3]

- 1) Establish an online data platform to collect user data.
- 2) Establish database, manage and operate data through DBMS database management system.
- 3) Provide intelligent embroidery design services, which can realize convenient independent design and ordering.[4]

5. Design of Online Service Platform

5.1. Feasibility Analysis

1) Technical Feasibility Analysis

Choose to use Eclipse to realize the development and design of the page, and use MYSQL database for data storage. Because we have learned to use Eclipse in the courses, and we can skillfully use Eclipse to write programs and design pages. [2]

2) Economic feasibility analysis

In the Internet era, every field is equipped with facilities for data and information processing. The software used in this development is open-source software, and there is no need to invest additional funds in the software part, and there is a platform to support the operation of this system. In this case, there is no need to invest funds in purchasing facilities.

3) Social Feasibility Analysis

Legal factors: This system is developed according to the actual situation of the source results of field investigation, which is the result of many researches and data analysis. The design of the system is completed independently and cannot be copied.[5]

User feasibility: The requirements of this system for users, for browsing the website users, do not need any special technical ability, as long as they can use mobile phones or computers and other electronic products.

5.2. Research Plan of the Project

- 1) Conduct market research to understand people's cognition and opinions on embroidery culture, to better implement and develop the online platform.

- 2) Discuss and implement relevant steps within the team.
- 3) Establish database, store and manage data.
- 4) Realize the development and application of the platform through code.
- 5) After the above steps are completed, publicize the platform and collect users.

The research routing as below Figure 1.

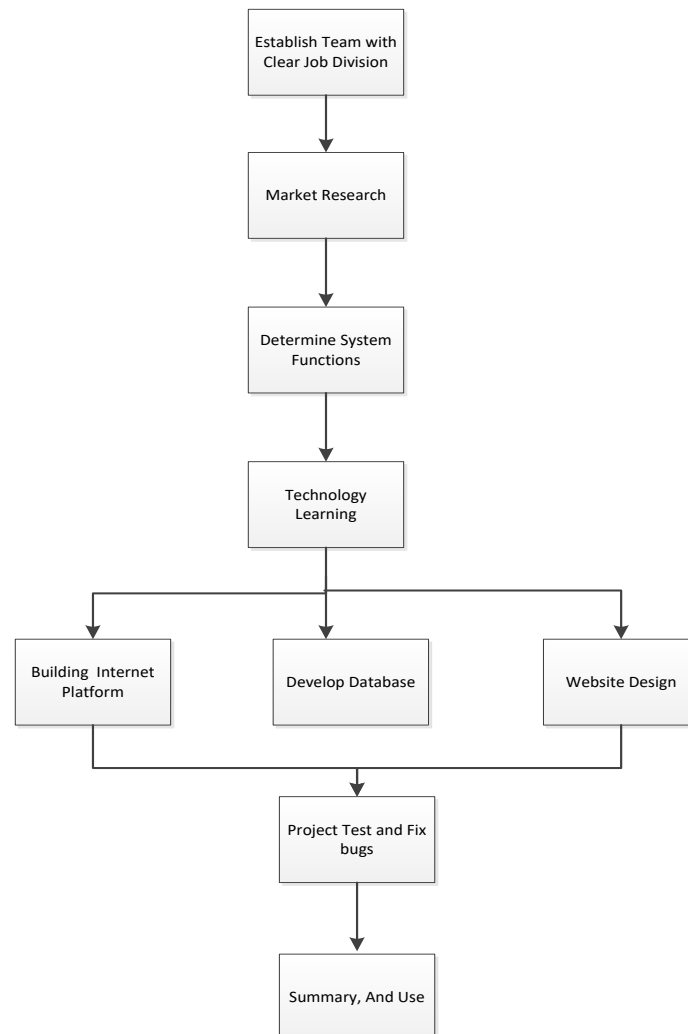


Figure 1: Research Routing

6. Conclusions

This project has the most emerging data pooling and painting design guidance tools, which can make it more convenient for users to provide independent services for embroidery. This project has perfect post-processing to effectively guarantee the design and customization of embroidery. Compared with traditional embroidery, Internet + embroidery has a wider audience and a more innovative form, which is conducive to the transformation and upgrading of the embroidery industry. The development of this project is conducive to the publicity and protection of the traditional embroidery culture of China's intangible cultural heritage and to adapt to the development of the new era. At the same time, it is conducive to improving the cultural protection consciousness of Chinese people, establishing national confidence, and promoting the continuous inheritance and development of China's excellent traditional culture.

Project Name

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References

- [1] Zhang Lili, Li Jiaojiao. *Creative design of traditional embroidery process from the perspective of National hot flashes in the New era. Fine Arts Observation*, 2021(02):18-20.
- [2] Jin Y. *Innovation and channel promotion of traditional handicraft in the Era of "Internet +" -- Taking Guizhou Miao embroidery as an example. Western Leather*, 202, 44(02):10-13.
- [3] Liu Jinping, Liu Xuedong. *Innovative application of "Internet +" fashion manual embroidery in design. Communications world*, 2019, 26(10):71-72.
- [4] Yan Xueting, Xu Qingqing. *Discussion on the development of Shaanxi folk embroidery in the Internet era. Tomorrow Fashion*, 2019(18):163.
- [5] Wang Qian, Sui Jiejing. *Research on protection and inheritance of Changzhou random needle embroidery based on "Internet +" background. Masterpieces Appreciation*, 2017(35):116-118.
- [6] Li Yan, Lu Mei, Chen Yueping. *The derivation and innovation of traditional embroidery. Light textile industry and technology*, 2020, 49(10):142-143.
- [7] Zeng Wenqi. *Research on productive Protection of Traditional Embroidery. Chinese National Academy of Arts*, 2016.