# **Project Proposal Report Paper**

## Local Clinic & Medical Platform: FastMed Beijing

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## **Problem Background**

As a college student who have spent 4 years' undergraduate career in Beijing, I deeply feel how difficult, costly and troublesome it is for non-locals to have a diagnosis in Beijing's hospitals. Unluckily, I happen to be physically frail and often have minor illnesses, and the outbreak of COVID-19 epidemic causes even more barriers for the routine process of hospital treatment and makes it more cumbersome.

Many of my friends in Beijing have similar problems. As contemporary college students, we are easily to have physical problems like cold, fever, cervical spondylosis, Falling and bruising, together with metal problems like insomnia. In these cases, however, our campus hospital often cannot offer timely and professional medical services for us, and it is also unrealistic for us to turn to public hospitals immediately due to Beijing's exploding population.

Clinics are pretty nice substitutes --- Not only do clinics provide more specialist treatment than campus hospitals, they can also avoid crowded queues for medical appointments and relieve the pressure on large public hospitals. But information on clinics in Beijing is currently scattered and there is a lack of a platform to provide students with accurate information on nearby medical services. In order to solve this pain point for Beijing college students like us, I decided to build an online platform which contains comprehensive location information for clinics in Beijing, so that they can go to a nearby clinic immediately, under the help of this platform, for prompt treatment when feeling unwell.

The persona types who might benefit from this platform including:

- #1 College students who need timely medical care.
- #2 Local residents who have troubles seeing a doctor in Beijing's hospital.
- #3 "Beijing drifters", other social workers without social security in Beijing, etc.

To sum up, my platform aiming at solutions of the following problem: to help college students and other social workers without social security in Beijing to look up accurate information of nearby clinics in time when they feel uncomfortable or have sudden health problems so that they can solve their health problem at first time and avoid endless queue for long time, inaccurate location information, invalid commuting, unprofessional diagnosis and other inconveniences due to the COVID-19 outbreak.

#### Requirements

For sustainable platform operation, the profit model need to be structured, consumers' consumption habit and merchants' willing for payment need to be considered for the design of profit and operation model. According to the result of questionnaire and interview, the profit model could be summarized as 4 channels: advertisement revenue, healthcare commerce, medical insurance and medical content development.

As a medical platform, our website offers advertisement area for convincing merchants to post the ad of their products or service, there are collaborations with healthcare product merchants to sell their goods in the online-commerce section. Medical insurance, as a special service with limited promotion channel, will also get involved as another key partner of our platform. Also, to make the website more

informative and add more SEO content, a sustainable PGC and OGC section related to medical knowledge and healthcare content need to be built in the website, link building optimization is also included in this section, to increase visitors' impression for long-term growth.

Since medical and healthcare is a very authoritative field, and unscientific information, low-quality product is likely to be misleading and infringe the rights of our consumer, cautious qualification authentication need to be done throughout the whole process of those 4 profit channel to test if the merchant has related legal qualification, if the selling product are good quality ones and if the healthcare information in online articles is of deception. All cooperation partners should be qualified meticulously.

## Design

The information Architecture (IA) of our platform are showed as follows:

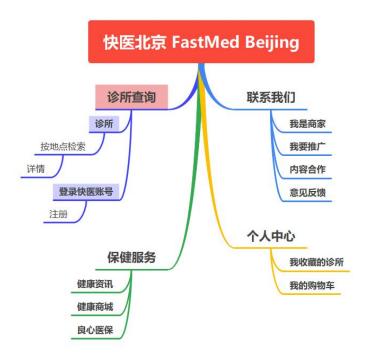


Figure 1: Information Architecture of FastMed Beijing

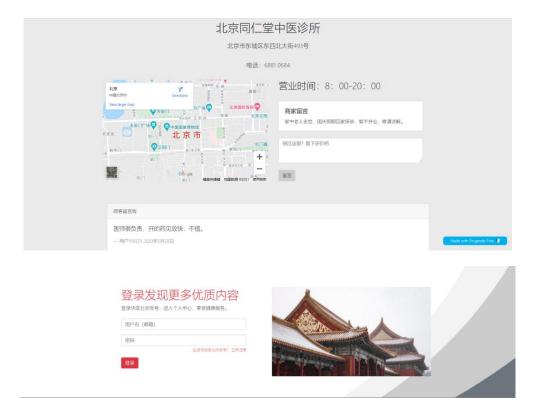
According to IA, the website contains 4 main section: Clinic Searching, Healthcare Service, Personal Centre and Contact Us. Clinic Searching is the index page, where users could find their target clinics according to different locations. Healthcare Centre include content area "Healthcare Info", commerce service "Healthcare Mall" and "Medical Insurance". Personal Centre provides log-in required service of "My Clinics" and "Shopping Cart", while Contact Us provide different channels for merchants and users to get in contact with our developer.

The index page is the core function of our website, that is, clinic searching. In this page clinics in Beijing is searched by area (16 districts), users can click the district where they belong, and enter the detailed subdivision of locations within a particular area to find the nearby clinics.





After entering the detailed page, users can look up the information of the clinics address, telephone numbers, etc, and could make comments on the page after actual visiting. The section of login and sign -up is also in the index page, for user to start the journey at the very first place. The login entrance is put in the bottom of the page throughout the whole journey of index clinic searching process.



## 立即注册快医北京账号

一站式享受便捷医疗服务

设置您的邮箱作为用户名		
用户名 (邮箱)		
我们保证您的邮箱信息不会被泄露		
设置您的密码		
密码		
立即注册		

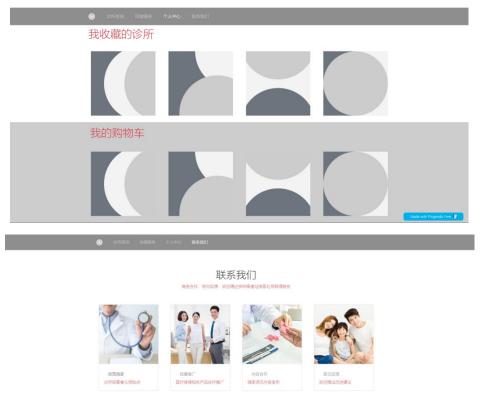
After sign in, the customer could enter the healthcare service area, then enjoy the e-commerce and personal clips. To grab user's attention and make them stay, PGC content section are designed at the top with informative healthcare related vertical content. Latest COVID-19 information will be highlighted. OGC content could also be included as our audience grow. SEO and link-building is considerable.



The commercial service in this page including healthcare mall and medical insurance. Users could click the purchase link of related products, add it to the purchase clips or share with others. After sign-up, users could view the personal centre and look up their personal favorite clinics or shopping cart.



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	您的宝贵意见,是我们改进的动力。			
	清留下您的邮箱,方便我们后续联系			
	却的建议			
	提交			
C			Made with Pingendo Free 🔰	

The last page "contact us" is designed for business cooperation and feedback collection. Clinic merchants could enter the first section to apply for the management of a particular clinic, so they will be authenticated to post official information on the open area of its detailed page. Healthcare products, including medical insurance merchants could click the second section to add their product into the commercial section. For content builders, they can click the third one to post PGC vertical contents on the page, and for users or consumers, the fourth entrance is to give feedback and suggestion for the page. To ensure authority, real-name authentication and business license and other relevant materials should be uploaded together.

## **Test & Evaluation**

#### **Usability Test**

### Test Objectives

The goal of my product is to help them find clinics information they need in time:

How to find the detailed information of a particular clinic in Beijing? Is it convenient
and timely enough for the consumer? Is it easy enough for merchants to collaborate?

What could be further improved for user experience?

The test objective is to help the user find a clinic in a given area in Beijing, and successfully look into details about this clinic, including address, telephone numbers

and open time, and find the product they need then go to the purchase link, finally give feedback to the site.

## Task Required

My usability test recruits 5 individuals who are college students having medical care needs as the typical persona shows. Assuming they are already logged in the site and started the journey, 3 tasks are designed for testing as follows:

- 1.Participants will be required to find "北京同仁堂中医诊所" in Anzhenqiao of Dongcheng District.
- 2.Participants will be required to find the purchase link of "SKG 颈椎按摩仪" and enter the purchase page.
- 3.Participants will be required to experience different pages and give suggestions to the page.



Figure 2: Usability Test Procedure

According to usability test and interviews, users' feedback are as follows:

1. The theme of this platform is useful, especially during the COVID-19 pandemic when there is a greater need for clinics. The main color of red is very consistent with the theme of the site, so that all the information is clear and intuitive, easy to find. Clinics can be found on the website by region and products can be purchased directly, functional integration is very practical. It is recommended to subdivide health services to provide users with more detailed health knowledge.

- 2. The interface is simple and clear, with complete functions and strong practicality, however, more icons could be attached to make the design vivid. And there are still functions to be realized, such as "upload" cannot be redirected to the upload interface.
- 3. Sections of Healthcare mall and Medical Insurance need more descriptive information like brand and license, otherwise it will seem less credible. The pictures should be attached links directly instead of using buttons for more convenience when purchasing.

#### Analytic & A/B Test

As of December 12, 2021, Google Analytics page views analysis shows that the average time on page for users is 28 seconds. Among them, the "Contact Us" page has the highest percentage of page views, reaching 33.33%, and the remaining page views are more evenly distributed, all at 13.67%. The exit percentage of the web page was 16.67%, and 50% of users opted out after browsing the "Contact Us". Unique page views accounted for 50% of the total number of page views.

Event tracking analysis shows that clicks on pictures accounted for the largest proportion of the total number of events, 26.32%. Followed by clicks on web page elements such as buttons, div elements and other elements account for 21.05% and 15.09% respectively. The total number of events in which users returned to the home page to find the function followed closely, accounting for 10.53%. The remaining events such as reading text content, registration and login accounted for 5.26% of all events, and the number of unique events accounted for 79% of the total number of

events.

In the AB Test experiment on the website, Google Optimize recorded the experimental data for a period of 17 days from November 27 to December 12, 2021. The design changes of the variant and the original version are the navigation bar (the original version is gray, and the variant is black). Among them, the original version accounted for 67% of the total number of experimental sessions, and the variant accounted for 33%. Compared with the original version, the average number of page views per session is 75% higher.

#### Recommendation

The overall construction of the website needs to be further optimized. In addition to the basic search function, "Healthcare Mall" and "Contact Us" related pages need to be improved. In order to enhance engagement, users can increase the interaction in the details page, or add a community page, consider building an online Beijing aid group. Content vertical categories can be subdivided by consulting professionals to meet the different health needs of different populations. The qualification verification mechanism of merchants needs to be further improved to ensure the legitimacy and reliability of merchants. In order to protect the rights and interests of consumers, anonymous complaint function can be added. The next step is to establish long-term and stable cooperation with relevant healthcare brands to ensure sustainable profitability of the platform and to launch paid health services.

## **Appendix**

1. Figma prototype of the initial version:

 $\underline{https://www.figma.com/proto/KhxApM1rzkn7nH4z578Tgt/\%E5\%BF\%AB\%E5\%8C}$ 

 $\underline{\%BB\%E5\%8C\%97\%E4\%BA\%AC?page\text{-}id\text{=}0\%3A1\&node\text{-}id\text{=}34\%3A155\&viewpor}$ 

t=241%2C48%2C0.5&scaling=min-zoom&starting-point-node-id=0%3A3

2. Templates used in Pingendo:

https://github.com/nromancer/Pingendo Templates.git

3. Detailed information:

Website URL: <a href="http://nromancer.pythonanywhere.com/">http://nromancer.pythonanywhere.com/</a>

GA Tracking code: UA-209917778-2

GO Container ID: OPT-PCRB7PL

GT Container ID: GTM-K7W8WLG

Property Name in GA: Final Project 1155165934

Gmail Address: <u>accelerato0625@gmail.com</u>