Progress Report

Project: Cardiovascular health measurement scales at our fingertips: Improving the efficiency of clinical decision-making through a futuristic Wiki

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1. **Project Objectives**

Based on the original Confluence Wiki system, this Wiki was rebuilt in the WordPress environment, with the aim of providing the latest recommendations on appropriate choices from possibly countless health measurement scales to predict cardiovascular events.

1. All content from the existing Wiki should be brought into WordPress, and the content in the new Wiki should be easy to browse.
2. Wiki should be more accessible and for external users, and future users, including medical students and physicists, can also edit and update.
3. Extend Wiki's content based on structured literature reviews, with the support of existing structured literature retrieval strategies, all relevant updates should be applied so that future users can keep up to date with the latest findings and can obtain appropriate statistics The content is related to the health measurement scale related to quality assessment.
4. **Methodology**
5. Literature review: Collect papers on Cardiovascular health measurement scales in the Ovid medical database, and then screen them according to PRISMA Flowchart, and then organize obtain appropriate statistics from potential papers in order to expand the latest content about health measurement scale on the website, which focuses on Contents of literature data on primary prevention and control in 2015-2020.
6. Design-demonstration website design: Use WP to reconstruct the website, evaluate the structure of the original website, and formulate a consistent website structure and layout design. Use WP's plugin ecosystem to meet functional requirements.
7. Analysis and comparison and comparative evaluation: Based on quantitative or qualitative analysis, collect user evaluation, compare the pros and cons of the original wiki and the current website, and adjust based on feedback.
8. **Progress**

**User interface and website content:**

1. The content of the original Confluence wiki has been transferred to the newly developed website.
2. User interface and interaction design UI design: navigation, color, global page design, core content area, column design, etc. are mostly completed, but need to be adjusted according to the feedback obtained by subsequent user evaluation.

**Literature review:**

Expanding the content of the Wiki based on a structured literature review has not yet been completed, only the preliminary selection of literature from 2020 to 2018 has been completed. The remaining documents for 2015-2017 need to be completed. And extract the data according to the needs in the expected literature and integrate it into the website.

**Functional design:**

In general, the functional requirements of the website have been roughly completed. The following are the implemented functionalities (many of which are added to improve user engagement or increase user activity), and subsequent adjustments are required.

1. User registration and login: Allow external users to register and log in, and support the use of social account login (Twitter, Facebook, Google), but still need to be provided API authorization ID.
2. User Center: Registered users can edit their personal information (password, email, subscription information, etc.), and users can view the list of registered users on the website for further discussion and communication.
3. Forum system: (authorized) users can create new forums, add new topics, and participate in discussions in the forums.
4. User social system: users can publish activities (website construction activities). The discussions and articles published by users in the forum can also be updated on the activity page. User can also create groups and joining groups, send real-time messages, follow users, etc.
5. Media subscription and mail function: Registered users can be added to the subscription list, in addition to welcome mail, users can subscribe to weekly or monthly new content. The system supports authorized users to post any email newsletter media content in the backend.
6. Achievement points system: The purpose of the system is to incentivize users to participate in website contributions. Users who post articles or start responding to events will receive corresponding reward points, which can be used to pay for restricted content. Or get the corresponding level badge.
7. **Follow-up plan**

According to the current progress, we are ahead of the original IPP plan. But the actual situation is not optimistic. In IPP, I plan to complete the literature expansion in about two weeks. But I underestimated the workload of literature review and literature content expansion, which requires another two weeks to complete the literature expansion. In the original plan, the time for collecting user feedback and the follow-up tasks for website adjustment were also very hasty. In order to allow enough time for the dissertation the follow-up plan:

After the website development reaches a stable state, I will continue to complete the rest of the literature selection. Then a user evaluation will be conducted and the website will be modified based on the feedback. Afterwards, the dissertation will be written. During this period, the literature data will also be extracted and uploaded to the website to complete the update of the website content. The rough Gantt chart is shown below.



Figure 1 Gantt chart for next stage plan