

CS3249 Project Progress Report

Self-Guided Learning System for Anatomy

Group Number:

Learning System 1

Group Members:

Dong Haoxuan A0085279N

Richard John Paul Goulter A0088816N

Tang Yixuan A0105507N

Wen Yiran A0105610Y

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1. PROJECT OVERVIEW

1.1. Objectives

The objective of this project is to create a self-learning software on anatomy. It enables teachers to create lessons consisting of various images and basic image annotations, and allows students to learn the lessons and take related quizzes.

The basic functions to expect for this software is listed as the following:

- A teacher can create a new lesson on (a part of the) human anatomy.
- A lesson contains one or more images of the human body of interest, annotations of various parts of the human body, a set of explanatory notes, and a self-test with multiple choice questions.
- A teacher can input the image of the lesson into the system.
- A teacher can use the system to create annotations of various parts in the image.
- An annotation consists of a line pointing to a body part in the image and a small box with a short descriptive text of the body part.
- A teacher can input a set of explanatory notes and the paging of the notes.
- A teacher can create a self-test of the lesson by entering each question, the choices, the correct answers and the passing mark.
- A teacher can modify any lessons, including deleting a lesson.
- A student can go to a lesson to study explanatory notes.
- A student can go to the next or previous page within a lesson.
- A student can click on an annotated body part and the linked pages in the explanatory notes are shown.
- A student can click on a word in a page with a hyperlink and the linked body part in the image is highlighted.
- A student can take the self-test.
- A student can go to the next lesson if he passes the self-test of the previous lesson.
- A student's self-test scores are saved.
- A teacher can check a student's self-test scores to evaluate his progress.
- The system can be run in either on-line or off-line mode. User authentication is required to run in on-line mode.
- In on-line mode, data in client side is automatically synchronised with those in the server.

1.2. Timeline and Milestones

The project is planned to be completed in eight weeks. The work to be done is divided into three phases. The first phase is the design phase, which lasts for three weeks. During the first phase, the overall GUI layout and system architecture of the product should be settled. The second phase is the base phase, which produces the first version of our product. It is also four-week long. The third phase is improvement phase. This period of time is for the team to get feedback on our software and improve it according to opinions from instructors, trial-users and peers. The last one week serves as a time buffer for the project report or any other unforeseen delays. The schedule for the milestones of our project is shown in Chart 1.

Version	Milestones	Deadline
1	GUI design settled down	Feb 21, 2014
2	System architecture settled down	March 6, 2014
3	Basic function implemented	April 3, 2014
4	Get feedback & refine the software	April 10, 2014
5	Final product	April 15, 2014

Chart 1. Schedule for milestones of CS3249 project

3. PROGRESS SUMMARY

3.1. Completed Tasks

In the first two weeks of the project, our team designed the graphic user interface of our product together.

The login window is designed below. The system will determine the user domain (a teacher or a student) automatically.



Diagram 1. Login Window

The main window of the student's view is shown as below.

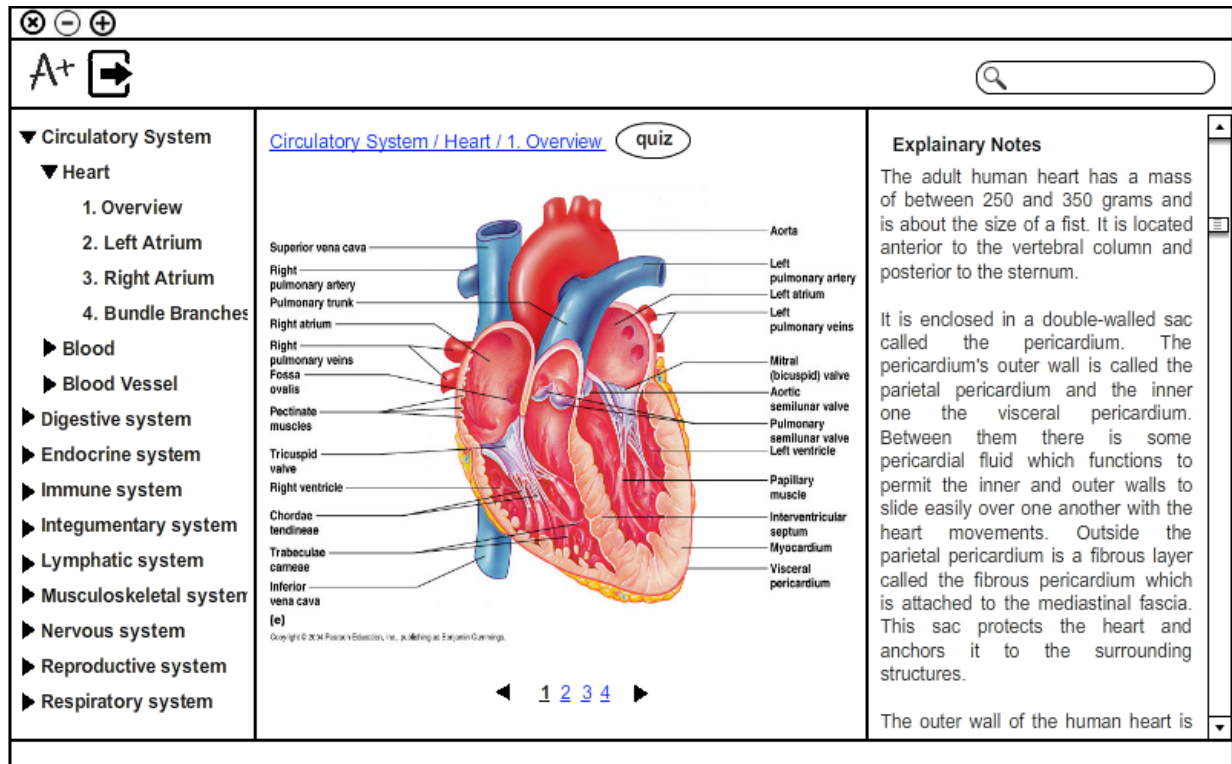


Diagram 2. Student's View

The main window of the teacher's view is shown as below. It has the same structure as the student's view. The buttons in the tool bar from left to right are: add a topic, add a subtopic, add an image, delete selected topic, subtopic or image, add an annotation, delete an annotation, save the changes, view student's quiz results and logout. Also, the teacher can edit the notes attached to the diagrams.

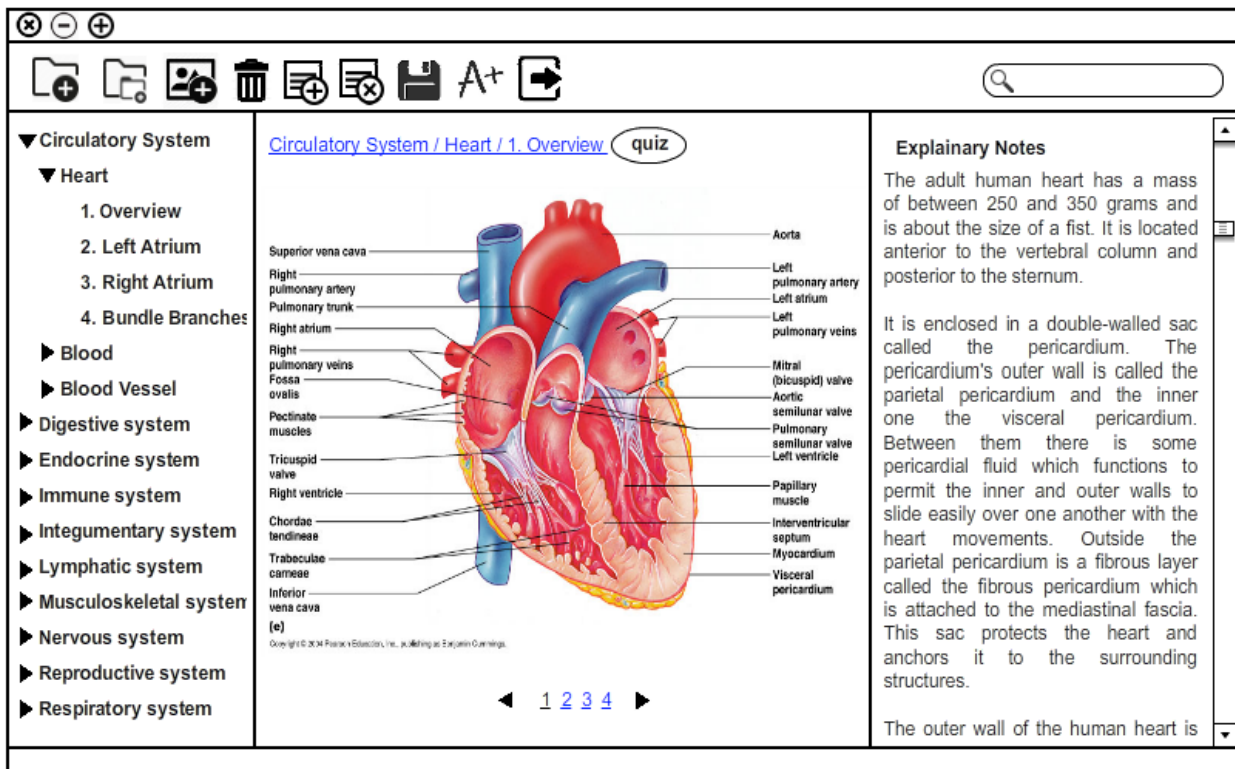


Diagram 3. Teacher's View

When the teacher adds a topic or a subtopic, a window will pop up.

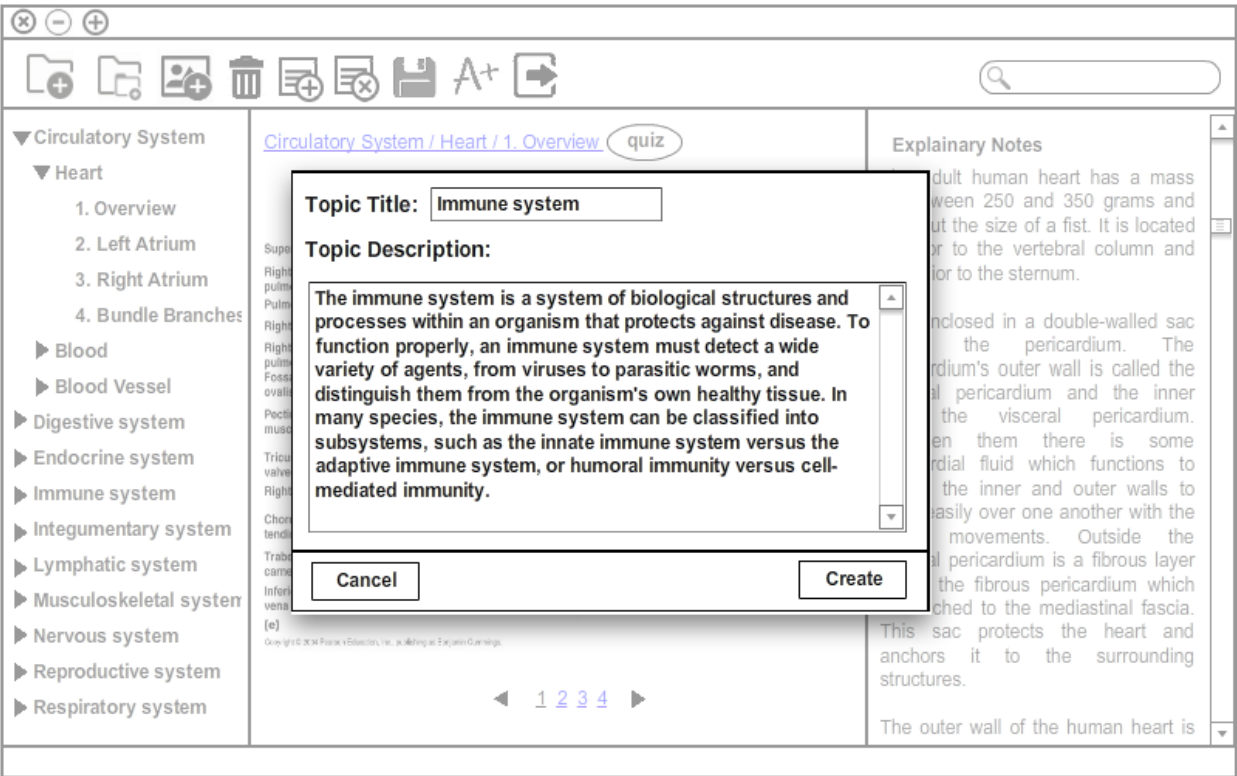


Diagram 4. Add a topic

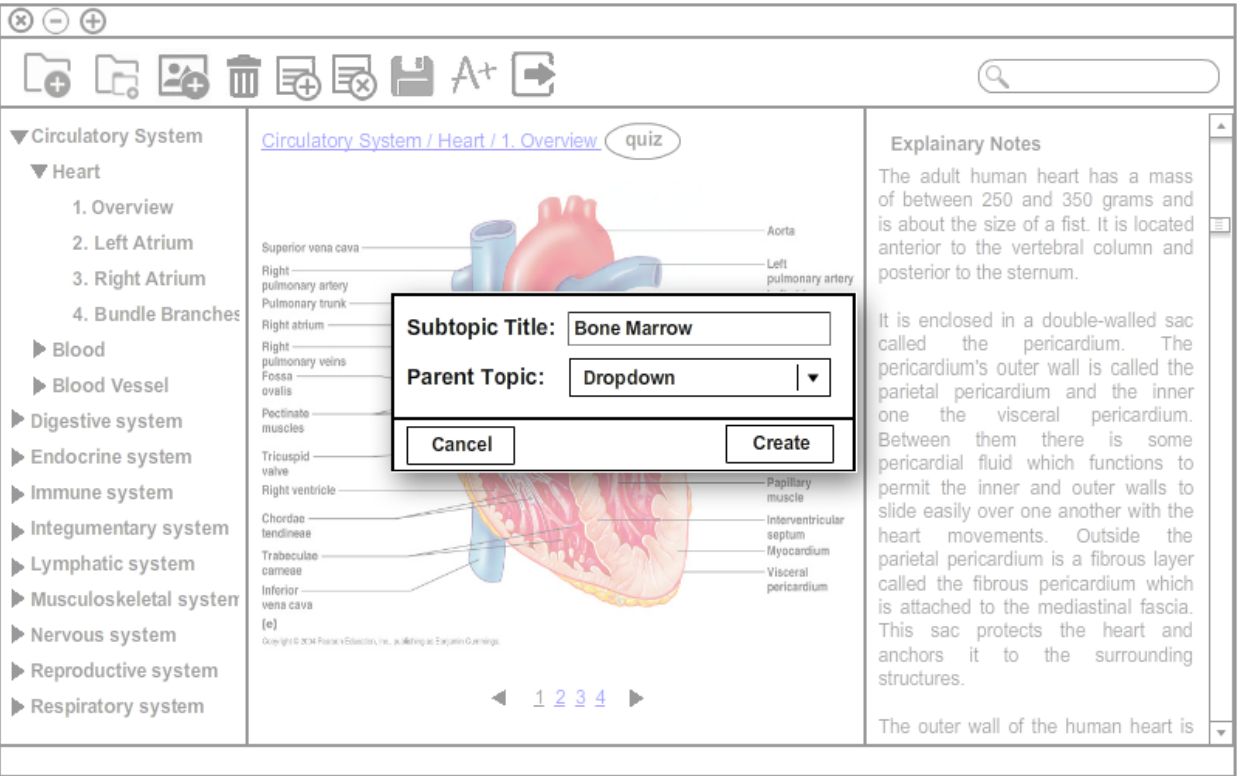


Diagram 5. Add a subtopic

3.2. Work to Do

First, the system architecture of this self-learning software should be designed before the implementation of the project begins. Second, the programming of the system will take most of the time, which should begin relatively early. After the system is programmed and well tested, several fellows should be invited to test and give feedback about the software. All the feedback will be gathered to guide the refining of the system.

4. REPORT SUMMARY

This progress report has presented current status of our CS3249 project. As stated, our team has completed the design of GUI layout. Overall, the progress of our team is on schedule and we should complete the project by the original deadline.