

COMP3030J Software Engineering

Project 2

2024-2025

User Document

Group 9

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Introduction

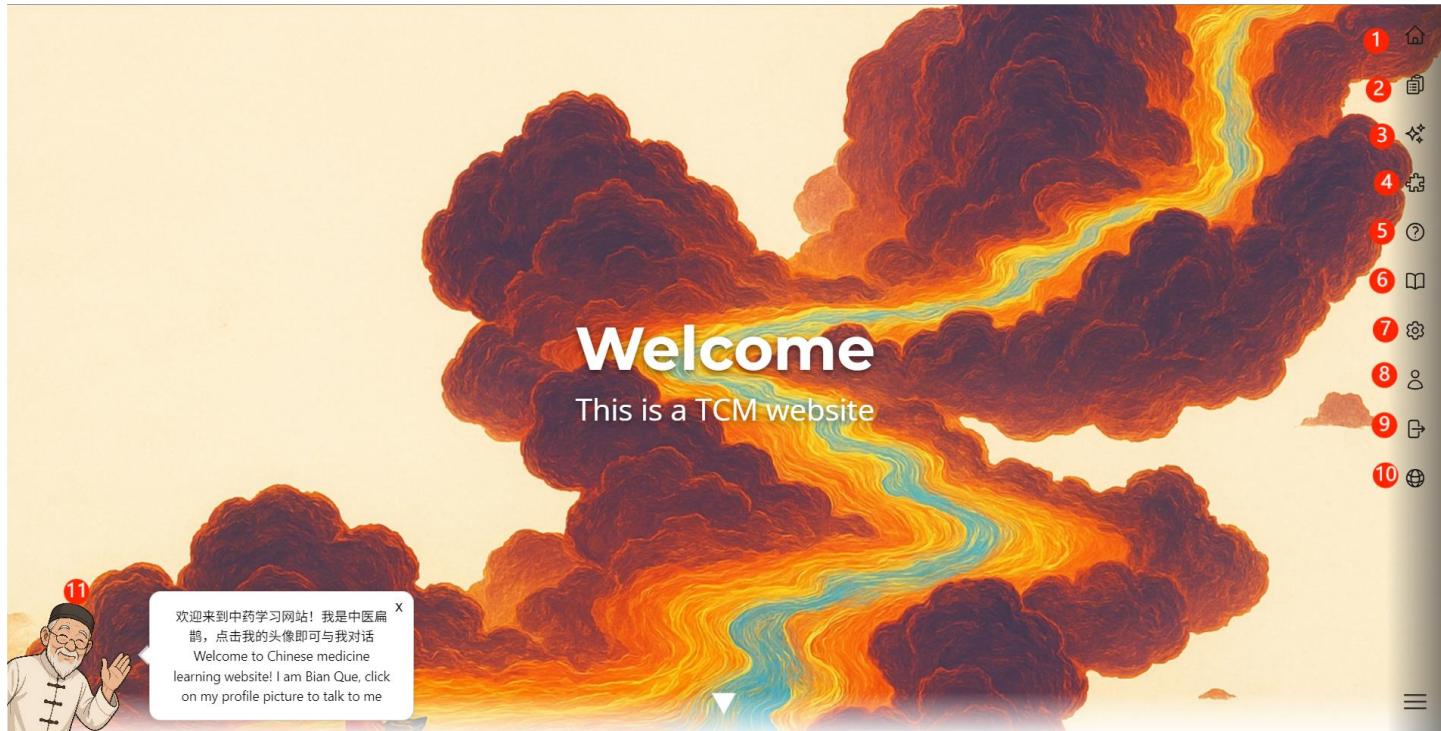
This document aims to provide comprehensive usage guidance for users of the **Huaxia TCM Education Platform**. The platform is a modern, bilingual digital learning tool designed to make Traditional Chinese Medicine (TCM) education more accessible, interactive, and engaging. Aimed at TCM students, educators, and enthusiasts, the platform integrates structured content, AI assistance, gamified learning, and cultural storytelling to address fragmented resources and low interactivity in current TCM education. By combining tradition with technology, it supports both personal learning and institutional use, contributing to the global promotion and preservation of TCM.

Our Website url is: <http://csi6220-1-vm3.ucd.ie/>

User Roles & Permissions

We provide following test account for you to test:

User Role	Permissions	Username	Password
Guest (Unregistered)	Browse public content (e.g., some herb information and course previews)	/	/
Registered User	Access learning functions, quizzes, games, AI assistant, story mode, etc.	Client	123456
Administrator	Manage users, publish content, edit herb and course information	Admin	123456



Home Page and Navigation Bar

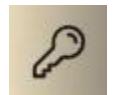
- | | |
|--|--|
| 1. Home Page | 7. Admin Page (Admin account only) |
| 2. Prescription List | 8. Profile |
| 3. Herb Encyclopedia | 9. Log out |
| 4. Prescription Formulation Game | 10. Change Language |
| 5. Quiz | 11. AI Assistant |
| 6. Story Mode | |

1. Registration and Login

- Open the platform homepage and click on the "**Register**" or "**Login**" button, located at the right side of the page.



The "**Register**" button



The "**Login**" button

2. Materia Medica & Prescriptions

2.1 Prescription Encyclopedia (Search Mode)

Prescription Encyclopedia

Search

Enter a keyword into the search bar to search for prescriptions.

A	Apricot Kernel ...	Arrest Wheezi...	Antelope Horn...	Agastache Qi...	
B	Bupleurum Cor...	B Blood Stasis-Ex...	Bupleurum an...	Bone-Clearing ...	
C	Cimicifuga and...	Celestial Empe...	Cough-Stoppi...	Cinnabar Mind...	Convulsion-Se...
C	Coughing with...	Cyperus and P...	Cinnamon Twi...	Cinnamon Twi...	Cinnamon and...
C	Channel-Cleari...	Center-Regulat...	Coptis and Offi...	Cannabis Fruit ...	Constraint-Res...
C	Coptis Toxin-R...	Channel-Warm...	Chinese Angelii...	Chinese Angelii...	Chinese Angelii...
C	Chinese Angelii...	Center-Supple...			

Agastache Qi-Correcting Powder

Chinese Name: **huo xiang zheng qi san** 蕁 香 正 气 散

Composition
Arecae Pericarpium, Angelicae Dahuiae Radix, Perillae Folium, Poria, Pinelliae Rhizoma, Atractylodis Macrocephalae Rhizoma, Citri Reticulatae Pericarpium, Magnoliae Officinalis Cortex, Platycodonis Radix, Pogostemonis Herba, Glycyrrhizae Radix et Rhizoma

Effects
Releases the exterior and removes dampness, rectifies qi and harmonizes the center.

Indications
Huo Xiang Zheng Qi San is indicated for the contraction of exogenous wind-cold and internal damage by internal dampness. The symptoms include aversion to cold with fever, headache, chest and diaphragm distension and depression, abdominal pain, nausea, vomiting, bowel sounds and diarrhea. The tongue has a white, greasy tongue coating. It can also be used to treat conditions that are contracted from the clouds and mists in the mountains, malaria, etc.

[Back to Prescription List](#)

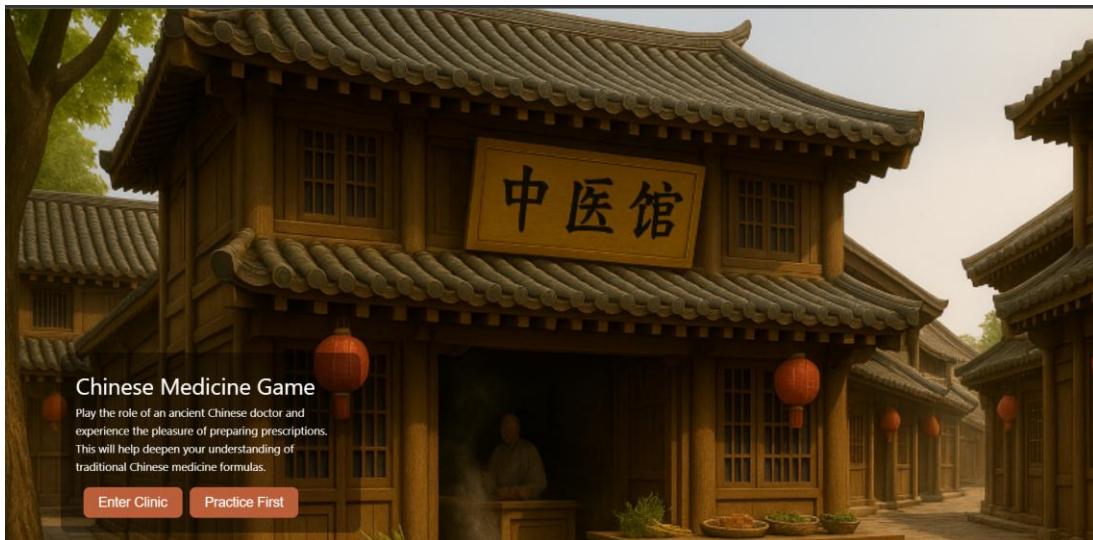
- At the top of the page, you will see a **search bar**. Enter a keyword (e.g., "Eight-Gem Decoction" or "Supreme Jewel Elixir") into the search bar to search for prescriptions.
- Click on a search result to view detailed information about the prescription:

2.2 Herb Encyclopedia (Classification & Search)

The screenshot shows the "Herb Encyclopedia" interface. At the top left is a "Functional classification Mode" toggle (1). Next to it is a search bar with an "Enter herb name..." placeholder and a "Search" button (2). On the left, there is a vertical sidebar with categories: Roots and rhizomes (3), Fruits and seeds, Flowers, Tree barks and root barks, Stems and woods, Zoological substances, Seaweeds and fungi, and Whole herbs. Below the sidebar is a cartoon character of a man in traditional Chinese clothing. The main area displays a grid of herb cards (4) under the heading "Roots and rhizomes". Each card contains a letter icon (R), the herb's name, and a short description. A red circle with the number 5 points to the fifth card in the grid, which is "Glehniae Radix".

- Classification Mode Toggle:** Switch between **Functional Classification Mode** (grouped by therapeutic effect) and **Category Mode** (grouped by plant part).
- Search Bar:** Enter a herb name (e.g., "Glehniae Radix") and press **Search**.
- Classification List:** Click a category (e.g., "Roots and Rhizomes") to filter the herbs displayed in the **Herb Grid**.
- Herb Grid:** Each herb is shown as a card with its first letter and name.
- Herb Card:** Click to view detailed information.

3. Prescription Formulation Game



3.1 Herb Selection Mode (Enter Clinic)



- Classification Toggle:** Use the outlined button to switch between **Functional classification Mode** and **Category Mode**.
- Category Filter Bar:** Click any category (e.g. “Roots and rhizomes”, “Flowers”) to filter the herb grid below.
- Herb Grid:** Browse and click herb cards to select them—each click adds that herb to your selection.

- Selected Herbs Board:** View your chosen herbs; click to remove that herb.
- Submit Button:** Once you've picked 2–10 herbs, click the **Finish Prescription** beneath the panel to submit and view recommended prescriptions.

3.2 Prescription Selection Mode (Practice First)

Screenshot 1 (Top): Prescription Selection Grid

Please select a prescription

Search Prescription 1 Search

A	B
Apricot Kernel and Perilla Powder	Arrest Wheezing Decoction
Antelope Horn and Uncaria Decoction	Agastache Qi-Correcting Powder
B	
Bupleurum Correction Beverage	Blood Stasis-Expelling Decoction
Bupleurum and Pueraria Muscle-Resolving Dec...	Bone-Clearing Powder

Screenshot 2 (Bottom): Selected Prescription Details

Selected Prescription: Apricot Kernel and Perilla Powder
Selected Herbs: Glehniae Radix, Triony whole Carapax

Select herbs according to the prescription
Functional classification Mode 2

Glehniae Radix	Ophiopogonis Radix	Angelicae Sinensis Radix	Lycii Fructus
Ginseng Radix et Rhizoma Rubra	Ginseng Radix et Rhizoma	Asini Corii Colla	
Atractylodis Macrocephalae Rhizoma	Glycyrrhizae Radix et Rhizoma	Paeoniae Radix Alba	
Testudinis Carapax et Plastrum	Triony whole Carapax	Jujubae Fructus	Dioscoreae Rhizoma
Eucommiae Cortex	Polygonati Odorati Rhizoma	Cuscutae Semen	Asparagi Radix
Morindae Officinalis Radix	Dendrobii Caulis	Psoraleae Fructus	Astragali Radix
Panacis Quinquefolii Radix	Cervi Cornu Pantotrichum	Cistanches Herba	Lili Bulbus
		Longan Arillus	Lablab Semen Album

Result Panel (Right):

- Extra herbs: 4
 - Triony whole Carapax
 - Glehniae Radix
- Missing herbs:
 - Platycodonis Radix
 - Citri Reticulatae Pericarpium
 - Jujubae Fructus
 - Aurantii Fructus
 - Glycyrrhizae Radix et Rhizoma
 - Pinelliae Rhizoma
 - Zingiberis Rhizoma Recens
 - Perillae Folium
 - Armeniacae Semen Amarum
 - Poria
 - Peucedani Radix
- Result
Match failed

- Prescription Prompt:** The target prescription name appears here. Click to pick a different prescription if desired.
- Herb Grid:** Click the cards for the herbs you think belong to the prescription.
- Submit Button**
- Result Panel:** After you click the submit button, the panel updates to show:

Extra herbs: Items you selected that aren't in the prescription.

Missing herbs: Required herbs you failed to select.

Result: Overall match status (e.g. "Match failed").

4. TCM Quiz



4.1 Image Herb Quiz

Choose the herb name corresponding to the picture below:

Cylindrical, slightly twisted, externally pale yellow or yellowish-brown
Oblong lanceolate leaves

Raphani Semen Nelumbinis Foli... Gentianae Radix et Rhizoma Peucedani Radix

Quiz Results

Your Answer: Raphani Semen Correct Answer: Gentianae Radix et Rhizoma	Incorrect
Your Answer: Moschus Correct Answer: Moschus	Correct
Your Answer: Lophatheri Herba Correct Answer: Cynanchi Aitrali Radix et Rhizoma	Incorrect
Your Answer: Platycladi Semen Correct Answer: Alantii Cortex	Incorrect
Your Answer: Manditis Ootheca Correct Answer: Rhei Radix et Rhizoma	Incorrect

Total time: 33 seconds

Restart

- Start Quiz:** Click “Start Quiz” under the Image Herb Quiz panel.
- Gameplay:** A high-res herb image appears with four name buttons.
- Feedback:** Immediate “Correct”/“Incorrect” message and brief identifier.
- Results:** After 5 questions, a summary shows each Q’s outcome, total time, and a **Restart** button.

4.2 Prescription Quiz

Prescription Name: Frigid Extremities Powder
Question ID: 46 Difficulty: 1

Selected Herbs: None

Enter herb name... Search Functional classification Mode Submit

G Glehniae Radix	O Ophiopogonis...	A Angelicae Sin...	R Rehmanniae R...	G Ginseng Radic...
G Ginseng Radic...	P Platycodonis ...	F Fritillariae Cir...	F Fritillariae Ust...	F Fritillariae Thu...
N Notopterygii ...	S Saposhnikovia...	A Atractylodis ...	A Atractylodis R...	A Asari Radix et ...
C Chuankong R...	A Angelicae Dah...	S Scutellariae R...	G Glycyrrhizae R...	P Pinelliae Rhi...
R Rhii Radix et ...	P Paeoniae Radi...	I Imperatae RH...	R Rubiae Radix ...	K Kansui Radix
E Euphorbiae Pe...	B Bupleuri Radix	Z Zingiberis RH...	G Gentianae Ma...	A Angelicae Pub...
A Aconiti Lateral...	A Anemarrhenae...	Z Zingiberis Rhi...	C Coptidis Rhizo...	A Alismatis Rhi...

Quiz Results

Question 1: Prescription Name: "Frigid Extremities Powder" Your Answer: Ophiopogonis Radix, Rubiae Radix et Rhizoma, Anemarrhenae Rhizoma Correct Answer: Glycyrrhizae Radix et Rhizoma, Aurantii Fructus Immaturus, Bupleuri Radix, Paeoniae Radix Alba	Incorrect
Question 2: Prescription Name: "Stomach-Calming Powder" Your Answer: Salvae Miltorrhizae Radix et Rhizoma, Typhonii Rhizoma, Stellatae Radix Correct Answer: Atractyloidis Rhizoma, Magnoliae Officinalis Cortex, Cinnamomi Cortex, Glycyrrhizae Radix et Rhizoma	Incorrect
Question 3: Prescription Name: "Melon Stalk Powder" Your Answer: Peucedani Radix, Polygalae Radix, Astragali Radix Correct Answer: Melo Pedicellus, Vignae Semen	Incorrect
Question 4: Prescription Name: "Oyster Shell Powder" Your Answer: Stemmonae Radix, Anemarrhena Rhizoma, Polypallae Radix Correct Answer: Astragali Radix, Ephedrae Herba, Ostrea Concha, Trifoli Fructus	Incorrect
Question 5: Prescription Name: "Three-Seed Pillar Devotion Decoction" Your Answer: Asteris Radix et Rhizoma, Polygalae Radix, Sereni, Raphani Semen Correct Answer: Perilla Frutescens, Brassicaceae Junccea Semen, Raphani Semen	Incorrect

Total time: 40 seconds

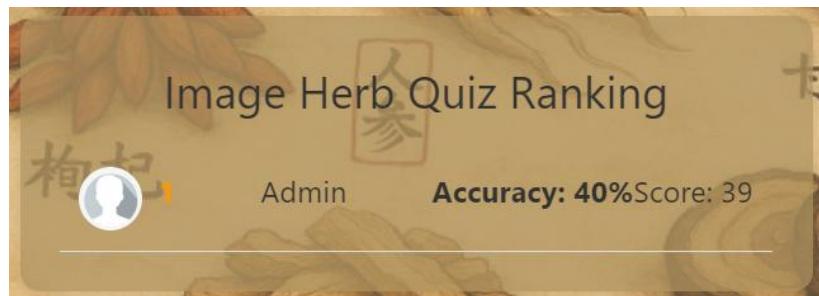
Restart

- Start Quiz:** Click “Start Quiz” under the Prescription Quiz panel.

- **Prompt:** Prescription name, question ID, and difficulty display at top.
- **Select Herbs:** Use classification toggles and category buttons to filter the herb grid; click to choose ingredients.
- **Feedback:** Click **Submit** to see “Correct!” or “Incorrect! The correct answer is: ...” inline.
- **Results:** After 5 questions, view overall accuracy, total time, and **Restart** button.

4.3 Leaderboard

- Each quiz panel shows a live **Ranking** card (top user’s avatar, name, accuracy, score or “No data yet”).
- Your quiz performance updates the leaderboard automatically



5. Profile Editing

Welcome to the profile page



User name:Admin		
User id:1		
Role:admin		
Height: <input type="text" value="cm"/>	Weight: <input type="text" value="kg"/>	Age: <input type="text" value="years old"/>
<input type="button" value="Update"/>		
<input type="button" value="Logout"/>		

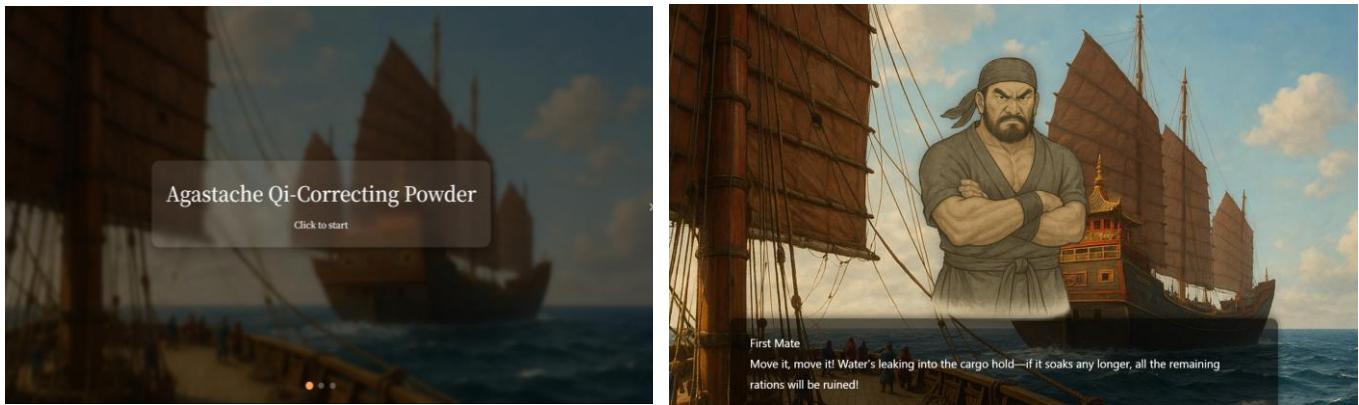
- After logging in, users can click on their profile icon to access **Profile Settings**.
- Here, users can update: **Height, Weight, Age, Avatar**
- Changes can be saved by clicking **Save**.

6. AI Assistant



- The AI Assistant icon is located in the bottom-left corner of the webpage. Click to open the chat window.
- Users can ask questions related to TCM, such as: "What is the classification of Chaihu?", "What are the effects of Ma Huang Tang?", "How to apply TCM theory for treating cold?"
- The AI Assistant provides responses powered by DeepSeek, along with references to relevant content.

7. Story Mode



- On the splash screen, click to begin the single interactive narrative.
- The story unfolds as a visual novel. Click the blank to continue.

8. Admin Features

User name:	Password:
Admin	123456

The Admin Panel has four main sections—Herb Management, Prescription Management, Home Page Management, User Management and Log Management—accessible via the top tabs.

- Herb Management:** Add herbs (Chinese/English names, images, category, origin, regions), edit or delete existing entries, and search or filter by name or category.
- Prescription Management:** Add prescriptions (Chinese/English names, composition, effects, indications), edit or delete them, and search by name.

Management Page

Herb management Prescription management Home page management User management Log Management

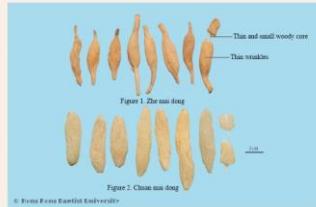
Herb Encyclopedia

Enter Search Mode Category Mode

Roots and rhizomes Fruits and seeds Flowers Tree barks and root barks Stems and woods Zoological substances Seaweeds and fungi Whole herbs Minerals Leaves Resins Others

Glehniae Radix Ophiopogonis Radix Angelicae Sinensis Radix Rehmanniae Radix Ginseng Radix et Rhizoma Rubra Ginseng Radix et Rhizoma Platycodonis Radix
Fritillariae Cirrhosae Bulbus Fritillariae Ussuriensis Bulbus Fritillariae Thunbergii Bulbus Notopterygii Rhizoma et Radix Saponnikoviae Radix
Atractylodis Macrocephalae Rhizoma Atractylodis Rhizoma Asari Radix et Rhizoma Chuanxiong Rhizoma Angelicae Dahuricae Radix Scutellariae Radix
Glycyrrhizae Radix et Rhizoma Pinelliae Rhizoma Rhei Radix et Rhizoma Paeoniae Radix Alba Imperatae Rhizoma Rubiae Radix et Rhizoma Kansui Radix
Euphorbiae Pekinensis Radix Bupleuri Radix Zingiberis Rhizoma Recens Gentianae Macrophyllae Radix Angelicae Pubescens Radix Aconiti Lateralis Radix Praeparata
Anemarrhenae Rhizoma Zingiberis Rhizoma Coptidis Rhizoma Alismatis Rhizoma Dioscoreae Hypoglaucae Rhizoma Dioscoreae Rhizoma Cimicifugae Rhizoma
Puerariae Lobatae Radix Scrophulariae Radix Salviae Miltiorrhizae Radix et Rhizoma Polygalae Radix Asparagi Radix Gastrodiae Rhizoma Cyathulae Radix
Linderae Radix Aucklandiae Radix Alpiniae Officinarum Rhizoma Asteris Radix et Rhizoma Stemona Radix Cynanchi Stauntonii Rhizoma et Radix Paeoniae Radix Rubra

2 / 麦冬 / Ophiopogonis Radix



Category: 根及根茎类 / Roots and rhizomes
Origin: 百合科植物麦冬Ophiopogon japonicus (Thunb.) Ker-Gawl. 的干燥块根。/ The dried tuberous root of Ophiopogon japonicas (Thunb.) Ker-Gawl.(Liliaceae)
Production Regions: 主产四川、浙江。/ Primarily produced in the Chinese provinces of Sichuan, Zhejiang.
Properties: 甘、微苦, 涩。/ Sweet, slightly bitter; cool
Functions: 滋阴生津、润肺止咳、清心除烦。主治热病伤津、心烦、口渴、咽干肺热、咳嗽、肺结核。/ Nourishes yin, encenders

Add new herb

Chinese Name:

English Name:

Image for Chinese:

Image for English:

Category (ZH):

Category (EN):

Origin (ZH):

Origin (EN):

2 / 九仙散 / Nine Immortals Powder

Composition: 人参、款冬花、桑白皮、桔梗、五味子、阿胶、乌蜜粟壳 / Ginseng Radix et Rhizoma; Farfarae Flos; Mori C Platycodonis Radix; Schisandra Chinensis Fructus; Asini Mume Fructus; Fritillariae Cirrhosae Bulbus; Papaveris Per Effects: 止咳平喘、益气养阴。/ Astringes the lung, relieves qi and nourishes yin.
Indications: 久咳肺虚证。久咳不已，肺气虚弱，咳甚则少而粘，脉虚数。/ Jiu Xian San is designed for a pattern cough caused by lung deficiency. The main symptoms in chronic, unremitting cough that may be accompanied by breathing in severe cases, spontaneous sweating, scanty phlegm, and a deficient, rapid pulse.

[edit](#) [delete](#)

prescriptions.editinfo

Chinese name:

English name:

Nine Ingredients Notopterygium Decoction

Composition (ZH):

羌活、防风、苍术、细辛、川芎、白芷、地黄、黄芩、甘草

Composition (EN):

Notopterygii Rhizoma et Radix; Saponnikoviae Radix; Atractylodis Rhizo

Effects (ZH):

发汗祛湿，兼清里热。

Effects (EN):

Induces sweating, expels dampness, and clears internal heat.

Indications (ZH):

外感风寒湿邪，内有蕴热证。恶寒发热，无汗，头痛项强，肢体酸楚疼痛，

- Home Page Management:** Upload or link bilingual carousel images and remove any you no longer need.
- User Management:** View all users, change avatars, edit user details (name, height, weight, age, role) or delete accounts.

Management Page

Herb management Prescription management Home page management User management Log Management

Homepage Management



Language: en

[Delete](#)



Language: en

[Delete](#)

Add New Image

Input url upload image

Chinese Image URL:

Enter Chinese image URL

English Image URL:

Enter English image URL

[Add](#)

Management Page

Herb management Prescription management Home page management User management Log Management

User Management



ID: 1 | Role: admin

Name: Admin

Height: cm, Weight: kg, Age: years old

Password: \$2b\$12\$Feqb4xc26Krjgis.11iVy./elyAnsTHsXmmaAFK.QRDIU9jsxzVDfq



ID: 2 | Role: client

Name: Client

Height: cm, Weight: kg, Age: years old

Password: \$2b\$12\$Feqb4xc26Krjgis.11iVy./elyAnsTHsXmmaAFK.QRDIU9jsxzVDfq

[Edit](#) [Delete](#)

[Edit](#) [Delete](#)

- **Log Management:** View, analyze, and export system logs for operational monitoring and debugging. The module includes real-time access logs and error logs, along with a bar chart summarizing URL access frequencies. Admins can load logs, export them as files, and visualize request distribution across different endpoints for better system oversight.

