import React, { useState, useEffect } from 'react';

// This is a simplified version of the ConceptExplainer component

const ConceptExplainer = () => {

const [question, setQuestion] = useState('');

const [messages, setMessages] = useState([

{

role: "assistant",

content: "Hi there! I'm your learning assistant for Introduction to Biology. What concept would you like me to explain?"

}

]);

const [loading, setLoading] = useState(false);

// Suggested questions the student can ask

const suggestedQuestions = [

"What is a cell membrane?",

"How does photosynthesis work?",

"What is the function of mitochondria?",

"Explain the difference between prokaryotic and eukaryotic cells."

];

const handleSubmit = async (e) => {

e.preventDefault();

if (!question.trim()) return;

// Add user question to chat

const userMessage = { role: "user", content: question };

setMessages([...messages, userMessage]);

// Clear input and show loading

setQuestion('');

setLoading(true);

// Simulate API call

setTimeout(() => {

let explanation = "";

// Simple keyword matching for demo

if (question.toLowerCase().includes('cell membrane')) {

explanation = "The cell membrane is a thin, flexible barrier that surrounds all living cells. It's made primarily of phospholipids arranged in a bilayer, along with proteins and cholesterol. Its main function is to regulate what enters and leaves the cell, maintaining the cell's internal environment.";

} else if (question.toLowerCase().includes('photosynthesis')) {

explanation = "Photosynthesis is the process by which plants, algae, and some bacteria convert sunlight, water, and carbon dioxide into glucose (sugar) and oxygen. It occurs in chloroplasts, which contain chlorophyll pigments that capture light energy.";

} else if (question.toLowerCase().includes('mitochondria')) {

explanation = "Mitochondria are often called the 'powerhouses of the cell' because they generate most of the cell's supply of ATP (adenosine triphosphate), the energy currency of cells.";

} else {

explanation = `I'll try to explain about "${question}". This concept relates to biology, but I don't have specific information about it in my current knowledge base.`;

}

// Add AI response to chat

const aiMessage = { role: "assistant", content: explanation };

setMessages(prevMessages => [...prevMessages, aiMessage]);

setLoading(false);

}, 1500);

};

return (

<div className="concept-explainer">

<div className="header">

<h1>Ask about course concepts</h1>

<p>Get explanations about Introduction to Biology topics</p>

</div>

<div className="chat-messages">

{messages.map((msg, index) => (

<div key={index} className={`message ${msg.role}`}>

{msg.content}

</div>

))}

{loading && <div className="message loading">Thinking...</div>}

</div>

<form onSubmit={handleSubmit}>

<input

type="text"

value={question}

onChange={(e) => setQuestion(e.target.value)}

placeholder="Ask about a course concept..."

disabled={loading}

/>

<button type="submit" disabled={loading || !question.trim()}>

Ask

</button>

</form>

{messages.length <= 2 && (

<div className="suggested-questions">

<p>Try asking about:</p>

<div className="suggestions">

{suggestedQuestions.map((q, i) => (

<button key={i} onClick={() => setQuestion(q)}>

{q}

</button>

))}

</div>

</div>

)}

</div>

);

};

export default ConceptExplainer;