

BAB VI

React *Progressive Web App* (PWA) II

6.1. Tujuan

1. Praktikan dapat memahami konsep dasar teknologi *Progressive Web App*
2. Praktikan mampu melakukan proses *deployment project* PWA dengan benar menggunakan layanan *hosting* Vercel
3. Praktikan dapat memahami dan mengimplementasikan *Progressive Web App* (PWA) menggunakan ReactJS
4. Praktikan dapat memahami konsep, menggunakan, dan mengintegrasikan RESTful API untuk *project* PWA
5. Praktikan dapat membangun *Single Page Application* (SPA) dengan React Hooks, error handling, state management, dan implementasi *localStorage* untuk data persistence.

6.2. Alat dan Bahan

1. Laptop
2. *Smartphone*
3. Browser
4. Text Editor (disarankan menggunakan Visual Studio Code)
5. Node.js
6. Git
7. Akun Github aktif untuk daftar Vercel

6.3. Dasar Teori

6.3.1. Progressive Web App (PWA)

Progressive Web App (PWA) adalah aplikasi web yang menggunakan pendekatan *progressive enhancement* untuk memberikan pengalaman seperti aplikasi *native*. PWA dapat diinstal pada perangkat pengguna, bekerja secara *offline* melalui *service worker*, dan menggunakan *web app manifest* untuk mengontrol perilaku instalasi serta tampilan. Tujuan utama PWA adalah menghadirkan aplikasi web yang andal, cepat, dan menarik, namun tetap berbasis teknologi web standar seperti HTML, CSS, dan JavaScript.

(Sumber: https://developer.mozilla.org/en-US/docs/Web/Progressive_web_apps)

6.3.2. React JS

React JS adalah pustaka JavaScript untuk membangun antarmuka pengguna (*user interface*). React menggunakan pendekatan *component-based* sehingga setiap bagian tampilan dipecah menjadi komponen yang dapat digunakan kembali. React juga menerapkan konsep *declarative programming*, di mana pengembang hanya perlu mendefinisikan bagaimana tampilan seharusnya pada suatu kondisi, dan React akan mengelola perubahan data secara otomatis melalui *Virtual DOM*. Tujuan utama React adalah memudahkan pengembang membuat antarmuka dinamis dan interaktif dengan struktur kode yang modular dan mudah dikelola.

(Sumber: <https://react.dev>)

6.3.3. Vite

Vite (diucapkan /vit/, dari bahasa Prancis yang berarti “cepat”) adalah sebuah *build tool* modern yang berfungsi untuk menjalankan dan membangun proyek aplikasi web *front-end*. Tujuan utama Vite adalah memberikan pengalaman pengembangan yang jauh lebih cepat dan efisien dibandingkan dengan alat-alat generasi sebelumnya. Vite memanfaatkan *native* ES modules pada browser modern untuk mempercepat waktu startup saat pengembangan, serta menggunakan *Rollup* untuk proses *build* produksi yang optimal.

(Sumber: <https://vite.dev/guide/>)

6.3.4. API

Application Programming Interface (API) adalah sekumpulan aturan dan protokol yang memungkinkan aplikasi atau sistem perangkat lunak berkomunikasi dan bertukar data. API mendefinisikan cara komponen perangkat lunak saling berinteraksi melalui permintaan (*request*) dan respons (*response*) yang terstruktur. API banyak digunakan untuk menghubungkan *frontend* dan *backend*, misalnya melalui layanan RESTful atau GraphQL, sehingga data dapat dikirim dan diterima secara efisien antar sistem.

(Sumber: <https://www.ibm.com/think/topics/api>)

6.3.5. Axios

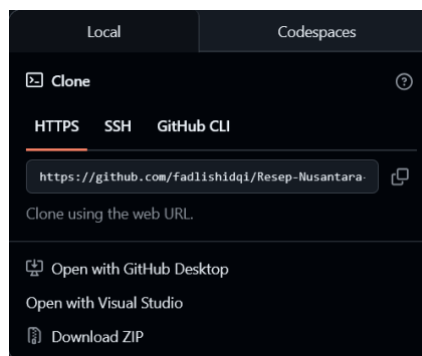
Axios adalah pustaka JavaScript berbasis *Promise* yang digunakan untuk melakukan permintaan HTTP dari browser maupun Node.js. Axios mendukung berbagai metode seperti GET, POST, PUT, dan DELETE, serta menyediakan fitur *interceptors*, *request cancellation*, dan transformasi data otomatis (misalnya format JSON). Keunggulan utama Axios adalah kemudahan integrasi dengan *frontend framework* seperti React, kemampuan penanganan kesalahan (*error handling*) yang baik, serta dukungan penuh untuk operasi asinkron menggunakan *async* dan *await*.

(Sumber: <https://axios-http.com/docs/intro>)

6.4. Langkah Kerja

6.4.1. Clone Repository Github Modul 4

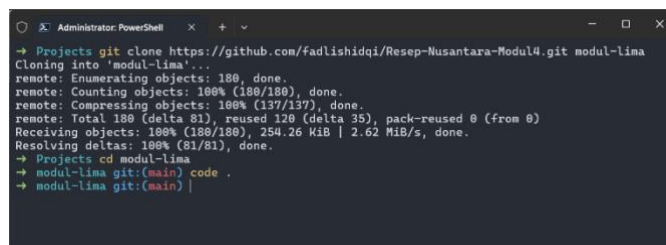
1. Buka *link* berikut [Link Repository Modul 4](#)
2. Klik tombol *Code* kemudian *copy link* yang tampil



Gambar 6. 1 Clone Repository Github Modul 4

3. Buka *terminal* dan ikuti *command* di bawah ini untuk *clone* dan membuka *project* pada IDE

```
> git clone https://github.com/fadlishidqi/Resep-Nusantara-Modul4.git modul-lima
> cd modul-lima
> code .
```



Gambar 6. 2 Membuka *project* hasil *clone* pada *local*

4. Apabila *project* modul 4 masih kalian simpan, lewat langkah di atas

6.4.2. Integrasi Frontend PWA dengan API

1. Baca dokumentasi API yang ada pada *link* berikut [Dokumentasi API](#)
2. Buat *file* konfigurasi API pada *src/config/api.js* sebagai berikut

```
import axios from 'axios';

// Base URL configuration
const BASE_URL = import.meta.env.VITE_API_BASE_URL;

// Create axios instance
const apiClient = axios.create({
  baseURL: BASE_URL,
```

```

    headers: {
      'Content-Type': 'application/json',
    },
    timeout: 10000,
  });

  // Request interceptor
  apiClient.interceptors.request.use(
    (config) => {
      return config;
    },
    (error) => {
      return Promise.reject(error);
    }
  );

  // Response interceptor
  apiClient.interceptors.response.use(
    (response) => {
      return response.data;
    },
    (error) => {
      const errorMessage = error.response?.data?.message ||
        error.message || 'An error occurred';
      return Promise.reject(error.response?.data || error);
    }
  );

  export { apiClient, BASE_URL };

```

3. Buat *environment file* (.env) pada *root project* sebagai berikut

```
VITE_API_BASE_URL=https://modlima.fuadfakhruz.id
```

4. Buat *custom hooks* (hooks/usexxx.js) untuk menggunakan *services* useRecipes.js

```

import { useState, useEffect, useCallback } from 'react';
import recipeService from '../services/recipeService';

/**
 * Custom hook for fetching recipes
 * @param {Object} params - Query parameters
 * @returns {Object} - { recipes, loading, error, pagination, refetch }
 */
export function useRecipes(params = {}) {
  const [recipes, setRecipes] = useState([]);
  const [loading, setLoading] = useState(true);
  const [error, setError] = useState(null);
  const [pagination, setPagination] = useState(null);

  const fetchRecipes = useCallback(async () => {

```

```

    try {
      setLoading(true);
      setError(null);
      const response = await
recipeService.getRecipes(params);

      if (response.success) {
        setRecipes(response.data || []);
        setPagination(response.pagination || null);
      } else {
        setError(response.message || 'Failed to fetch
recipes');
      }
    } catch (err) {
      setError(err.message || 'An error occurred while
fetching recipes');
      setRecipes([]);
    } finally {
      setLoading(false);
    }
  }, [JSON.stringify(params)]);

  useEffect(() => {
    fetchRecipes();
  }, [fetchRecipes]);

  return {
    recipes,
    loading,
    error,
    pagination,
    refetch: fetchRecipes,
  };
}

/**
 * Custom hook for fetching a single recipe
 * @param {string} id - Recipe ID
 * @returns {Object} - { recipe, loading, error, refetch
}
 */
export function useRecipe(id) {
  const [recipe, setRecipe] = useState(null);
  const [loading, setLoading] = useState(true);
  const [error, setError] = useState(null);

  const fetchRecipe = useCallback(async () => {
    if (!id) {
      setLoading(false);
      return;
    }

    try {
      setLoading(true);
      setError(null);

```

```

const response = await
recipeService.getRecipeById(id);

    if (response.success) {
        setRecipe(response.data);
    } else {
        setError(response.message || 'Failed to fetch
recipe');
    }
} catch (err) {
    setError(err.message || 'An error occurred while
fetching recipe');
    setRecipe(null);
} finally {
    setLoading(false);
}
}, [id]);

useEffect(() => {
    fetchRecipe();
}, [fetchRecipe]);

return {
    recipe,
    loading,
    error,
    refetch: fetchRecipe,
};
}

```

useReviews.js

```

import { useState, useEffect, useCallback } from 'react';
import reviewService from '../services/reviewService';

/**
 * Custom hook for fetching reviews
 * @param {string} recipeId - Recipe ID
 * @returns {Object} - { reviews, loading, error, refetch
}
 */
export function useReviews(recipeId) {
    const [reviews, setReviews] = useState([]);
    const [loading, setLoading] = useState(true);
    const [error, setError] = useState(null);

    const fetchReviews = useCallback(async () => {
        if (!recipeId) {
            setLoading(false);
            return;
        }

        try {
            setLoading(true);
            setError(null);

```



```

        const response = await
reviewService.getReviews(recipeId);

        if (response.success) {
            setReviews(response.data || []);
        } else {
            setError(response.message || 'Failed to fetch
reviews');
        }
    } catch (err) {
        setError(err.message || 'An error occurred while
fetching reviews');
        setReviews([]);
    } finally {
        setLoading(false);
    }
}, [recipeId]);

useEffect(() => {
    fetchReviews();
}, [fetchReviews]);

return {
    reviews,
    loading,
    error,
    refetch: fetchReviews,
};
}

/**
 * Custom hook for creating a review
 * @returns {Object} - { createReview, loading, error,
success }
 */
export function useCreateReview() {
    const [loading, setLoading] = useState(false);
    const [error, setError] = useState(null);
    const [success, setSuccess] = useState(false);

    const createReview = async (recipeId, reviewData) => {
        try {
            setLoading(true);
            setError(null);
            setSuccess(false);

            const response = await
reviewService.createReview(recipeId, reviewData);

            if (response.success) {
                setSuccess(true);
                return response;
            } else {
                setError(response.message || 'Failed to create
review');
                return null;
            }
        }
    }
}

```

```

    }
    } catch (err) {
      setError(err.message || 'An error occurred while
creating review');
      return null;
    } finally {
      setLoading(false);
    }
  };

  return {
    createReview,
    loading,
    error,
    success,
  };
}

```

useFavorites.js

```

import { useState, useEffect, useCallback } from 'react';
import favoriteService from '../services/favoriteService';
import userService from '../services/userService';

/**
 * Get user identifier from localStorage or generate new
 * one
 */
const getUserIdentifier = () => {
  return userService.getUserIdentifier();
};

/**
 * Custom hook for fetching favorites
 * @returns {Object} - { favorites, loading, error,
refetch }
 */
export function useFavorites() {
  const [favorites, setFavorites] = useState([]);
  const [loading, setLoading] = useState(true);
  const [error, setError] = useState(null);
  const userIdentifier = getUserIdentifier();

  const fetchFavorites = useCallback(async () => {
    try {
      setLoading(true);
      setError(null);
      const response = await
favoriteService.getFavorites(userIdentifier);

      if (response.success) {
        setFavorites(response.data || []);
      } else {

```

```

        setError(response.message || 'Failed to fetch
favorites');
    }
    } catch (err) {
        setError(err.message || 'An error occurred while
fetching favorites');
        setFavorites([]);
    } finally {
        setLoading(false);
    }
}, [userIdentifier]);

useEffect(() => {
    fetchFavorites();
}, [fetchFavorites]);

return {
    favorites,
    loading,
    error,
    refetch: fetchFavorites,
};
}

/**
 * Custom hook for toggling favorites
 * @returns {Object} - { toggleFavorite, loading, error }
 */
export function useToggleFavorite() {
    const [loading, setLoading] = useState(false);
    const [error, setError] = useState(null);
    const userIdentifier = getUserIdentifier();

    const toggleFavorite = async (recipeId) => {
        try {
            setLoading(true);
            setError(null);

            const response = await
favoriteService.toggleFavorite({
                recipe_id: recipeId,
                user_identifier: userIdentifier,
            });

            if (response.success) {
                return response.data;
            } else {
                setError(response.message || 'Failed to toggle
favorite');
                return null;
            }
        } catch (err) {
            setError(err.message || 'An error occurred while
toggling favorite');
            return null;
        } finally {

```

```

        setLoading(false);
    }
};

return {
    toggleFavorite,
    loading,
    error,
};
}

/**
 * Custom hook to check if a recipe is favorited
 * @param {string} recipeId - Recipe ID
 * @returns {Object} - { isFavorited, loading, toggleFavorite }
 */
export function useIsFavorited(recipeId) {
    const { favorites, loading: fetchLoading, refetch } = useFavorites();
    const { toggleFavorite: toggle, loading: toggleLoading } = useToggleFavorite();

    const isFavorited = favorites.some(fav => fav.id === recipeId);

    const toggleFavorite = async () => {
        const result = await toggle(recipeId);
        if (result) {
            await refetch();
        }
        return result;
    };

    return {
        isFavorited,
        loading: fetchLoading || toggleLoading,
        toggleFavorite,
    };
}

export { getUserIdentifier };

```

5. Implementasi *services* (src/services/xxxService.js) untuk membuat *method fetch* API sesuai dengan *endpoint*

recipeService.js

```

import { apiClient } from '../config/api';

class RecipeService {
    /**
     * Get all recipes with optional filters
     * @param {Object} params - Query parameters
     */
}

```

```

    * @param {number} params.page - Page number (default:
1)
    * @param {number} params.limit - Items per page
(default: 10)
    * @param {string} params.category - Filter by
category: 'makanan' | 'minuman'
    * @param {string} params.difficulty - Filter by
difficulty: 'mudah' | 'sedang' | 'sulit'
    * @param {string} params.search - Search in
name/description
    * @param {string} params.sort_by - Sort by field
(default: 'created_at')
    * @param {string} params.order - Sort order: 'asc' |
'desc' (default: 'desc')
    * @returns {Promise}
    */
    async getRecipes(params = {}) {
        try {
            const response = await
apiClient.get('/api/v1/recipes', { params });
            return response;
        } catch (error) {
            throw error;
        }
    }

/**
 * Get recipe by ID
 * @param {string} id - Recipe ID
 * @returns {Promise}
 */
    async getRecipeById(id) {
        try {
            const response = await
apiClient.get(`/api/v1/recipes/${id}`);
            return response;
        } catch (error) {
            throw error;
        }
    }

/**
 * Create new recipe
 * @param {Object} recipeData - Recipe data
 * @returns {Promise}
 */
    async createRecipe(recipeData) {
        try {
            const response = await
apiClient.post('/api/v1/recipes', recipeData);
            return response;
        } catch (error) {
            throw error;
        }
    }
}

```

```

/**
 * Update existing recipe (full replacement)
 * @param {string} id - Recipe ID
 * @param {Object} recipeData - Complete recipe data
(all fields required)
 * @returns {Promise}
 */
async updateRecipe(id, recipeData) {
  try {
    const response = await
apiClient.put(`/api/v1/recipes/${id}`, recipeData);
    return response;
  } catch (error) {
    throw error;
  }
}

/**
 * Partially update recipe (only send fields to update)
 * @param {string} id - Recipe ID
 * @param {Object} partialData - Partial recipe data
(only fields to update)
 * @returns {Promise}
 */
async patchRecipe(id, partialData) {
  try {
    const response = await
apiClient.patch(`/api/v1/recipes/${id}`, partialData);
    return response;
  } catch (error) {
    throw error;
  }
}

/**
 * Delete recipe
 * @param {string} id - Recipe ID
 * @returns {Promise}
 */
async deleteRecipe(id) {
  try {
    const response = await
apiClient.delete(`/api/v1/recipes/${id}`);
    return response;
  } catch (error) {
    throw error;
  }
}
}

export default new RecipeService();

```

reviewService.js

```
import { apiClient } from '../config/api';

class ReviewService {
  /**
   * Get all reviews for a recipe
   * @param {string} recipeId - Recipe ID
   * @returns {Promise}
   */
  async getReviews(recipeId) {
    try {
      const response = await
apiClient.get(`/api/v1/recipes/${recipeId}/reviews`);
      return response;
    } catch (error) {
      throw error;
    }
  }

  /**
   * Create review for a recipe
   * @param {string} recipeId - Recipe ID
   * @param {Object} reviewData - Review data
   * @param {string} reviewData.user_identifier - User
identifier
   * @param {number} reviewData.rating - Rating (1-5)
   * @param {string} reviewData.comment - Review comment
(optional)
   * @returns {Promise}
   */
  async createReview(recipeId, reviewData) {
    try {
      const response = await
apiClient.post(`/api/v1/recipes/${recipeId}/reviews`,
reviewData);
      return response;
    } catch (error) {
      throw error;
    }
  }

  /**
   * Update existing review
   * @param {string} reviewId - Review ID
   * @param {Object} reviewData - Updated review data
   * @param {number} reviewData.rating - Rating (1-5)
   * @param {string} reviewData.comment - Review comment
(optional)
   * @returns {Promise}
   */
  async updateReview(reviewId, reviewData) {
    try {
      const response = await
apiClient.put(`/api/v1/reviews/${reviewId}`, reviewData);
      return response;
    }
  }
}
```

```

    } catch (error) {
      throw error;
    }
  }

  /**
   * Delete review
   * @param {string} reviewId - Review ID
   * @returns {Promise}
   */
  async deleteReview(reviewId) {
    try {
      const response = await
apiClient.delete(`/api/v1/reviews/${reviewId}`);
      return response;
    } catch (error) {
      throw error;
    }
  }
}

export default new ReviewService();

```

uploadService.js

```

import axios from 'axios';
import { BASE_URL } from '../config/api';

class UploadService {
  /**
   * Upload recipe image to MinIO
   * @param {File} file - Image file to upload
   * @returns {Promise}
   */
  async uploadImage(file) {
    try {
      // Validate file
      if (!file) {
        throw new Error('No file provided');
      }

      // Validate file type
      const allowedTypes = ['image/jpeg', 'image/jpg',
'image/png', 'image/webp'];
      if (!allowedTypes.includes(file.type)) {
        throw new Error('Invalid file type. Allowed:
.jpg, .jpeg, .png, .webp');
      }

      // Validate file size (5MB)
      const maxSize = 5 * 1024 * 1024; // 5MB in bytes
      if (file.size > maxSize) {
        throw new Error('File size exceeds 5MB limit');
      }
    }
  }
}

```



```

        // Create form data
        const formData = new FormData();
        formData.append('image', file);

        // Upload to server
        const response = await
        axios.post(`${BASE_URL}/api/v1/upload`, formData, {
            headers: {
                'Content-Type': 'multipart/form-data',
            },
            timeout: 30000, // 30 seconds for upload
        });

        return response.data;
    } catch (error) {
        throw error;
    }
}

export default new UploadService();

```

favoriteService.js

```

import { apiClient } from '../config/api';
class FavoriteService {
    /**
     * Get all favorite recipes by user identifier
     * @param {string} userIdentifier - User identifier
     * @returns {Promise}
     */
    async getFavorites(userIdentifier) {
        try {
            const response = await
            apiClient.get('/api/v1/favorites', {
                params: { user_identifier: userIdentifier }
            });
            return response;
        } catch (error) {
            throw error;
        }
    }

    /**
     * Toggle favorite (add if not exists, remove if
     exists)
     * @param {Object} data - Favorite data
     * @param {string} data.recipe_id - Recipe ID
     * @param {string} data.user_identifier - User
     identifier
     * @returns {Promise}
     */
    async toggleFavorite(data) {
        try {

```

```

        const response = await
apiClient.post('/api/v1/favorites/toggle', data);
        return response;
      } catch (error) {
        throw error;
      }
    }
  }
}

export default new FavoriteService();

```

userService.js

```

const USER_PROFILE_KEY = 'user_profile';
const USER_IDENTIFIER_KEY = 'user_identifier';
/**
 * Get or generate user identifier
 */
export const getUserIdentifier = () => {
  let userId = localStorage.getItem(USER_IDENTIFIER_KEY);
  if (!userId) {
    userId =
`user_${Date.now()}_${Math.random().toString(36).substr(2
, 9)}`;
    localStorage.setItem(USER_IDENTIFIER_KEY, userId);
  }
  return userId;
};

/**
 * Get user profile from localStorage
 */
export const getUserProfile = () => {
  try {
    const profile =
localStorage.getItem(USER_PROFILE_KEY);
    if (profile) {
      return JSON.parse(profile);
    }

    // Return default profile with user identifier
    return {
      username: 'Pengguna',
      avatar: null,
      bio: '',
      userId: getUserIdentifier()
    };
  } catch (error) {
    return {
      username: 'Pengguna',
      avatar: null,
      bio: '',
      userId: getUserIdentifier()
    };
  }
}

```

```

};

/**
 * Save user profile to localStorage
 */
export const saveUserProfile = (profile) => {
  try {
    const userId = getUserIdentifier();
    const profileData = {
      ...profile,
      userId,
      updatedAt: new Date().toISOString()
    };
    localStorage.setItem(USER_PROFILE_KEY,
JSON.stringify(profileData));
    return { success: true, data: profileData };
  } catch (error) {
    return { success: false, message: error.message };
  }
};

/**
 * Update user avatar
 */
export const updateAvatar = (avatarBase64) => {
  try {
    const profile = getUserProfile();
    profile.avatar = avatarBase64;
    return saveUserProfile(profile);
  } catch (error) {
    return { success: false, message: error.message };
  }
};

/**
 * Update username
 */
export const updateUsername = (username) => {
  try {
    const profile = getUserProfile();
    profile.username = username.trim() || 'Pengguna';
    return saveUserProfile(profile);
  } catch (error) {
    return { success: false, message: error.message };
  }
};

/**
 * Update bio
 */
export const updateBio = (bio) => {
  try {
    const profile = getUserProfile();
    profile.bio = bio.trim();
    return saveUserProfile(profile);
  } catch (error) {

```

```

        return { success: false, message: error.message };
    }
};

export default {
    getUserIdentifier,
    getUserProfile,
    saveUserProfile,
    updateAvatar,
    updateUsername,
    updateBio
};

```

6. Lanjut ke *folder* `src/pages` kemudian edit tiap *file* yang ada didalamnya dengan kode di bawah ini

CreateRecipePage.jsx

```

// src/pages/CreateRecipePage.jsx
import { useState, useEffect } from 'react';
import { ArrowLeft, Upload, X, Plus, Image as ImageIcon, Loader, Save, AlertCircle, CheckCircle } from 'lucide-react';
import recipeService from '../services/recipeService';
import uploadService from '../services/uploadService';
import { saveDraft, loadDraft, deleteDraft, hasDraft, getDraftTimestamp, formatDraftTime } from '../utils/draftStorage';
import ConfirmModal from '../components/modals/ConfirmModal';

export default function CreateRecipePage({ onBack, onSuccess }) {
    // Step state: 'upload' or 'form'
    const [currentStep, setCurrentStep] = useState('upload');

    const [formData, setFormData] = useState({
        name: '',
        category: 'makanan',
        description: '',
        prep_time: '',
        cook_time: '',
        servings: '',
        difficulty: 'mudah',
        is_featured: false,
    });

    const [imageFile, setImageFile] = useState(null);
    const [imagePreview, setImagePreview] = useState(null);
    const [uploadedImageUrl, setUploadedImageUrl] = useState('');
    const [ingredients, setIngredients] = useState([{ name: '', quantity: '' }]);
    const [steps, setSteps] = useState(['']);

```

```

const [uploading, setUploading] = useState(false);
const [creating, setCreating] = useState(false);
const [error, setError] = useState('');
const [showDraftModal, setShowDraftModal] =
useState(false);
const [draftTimestamp, setDraftTimestamp] =
useState(null);
const [autoSaveEnabled, setAutoSaveEnabled] =
useState(true);

// Check for existing draft on mount
useEffect(() => {
  if (hasDraft('create')) {
    const timestamp = getDraftTimestamp('create');
    setDraftTimestamp(timestamp);
    setShowDraftModal(true);
  }
}, []);

// Auto-save draft every 30 seconds (only when in form
step)
useEffect(() => {
  if (!autoSaveEnabled || currentStep !== 'form')
return;

  const interval = setInterval(() => {
    handleSaveDraft();
  }, 30000); // 30 seconds

  return () => clearInterval(interval);
}, [formData, ingredients, steps, autoSaveEnabled,
currentStep]);

// Load draft
const handleLoadDraft = () => {
  const draft = loadDraft('create');
  if (draft) {
    setFormData(draft.formData || formData);
    setIngredients(draft.ingredients || ingredients);
    setSteps(draft.steps || steps);
    if (draft.uploadedImageUrl) {
      setUploadedImageUrl(draft.uploadedImageUrl);
      setImagePreview(draft.uploadedImageUrl);
      setCurrentStep('form'); // Go to form if image
was uploaded
    }
    setShowDraftModal(false);
    alert('Draft berhasil dimuat!');
  }
};

// Discard draft
const handleDiscardDraft = () => {
  deleteDraft('create');
  setShowDraftModal(false);

```

```

        setDraftTimestamp(null);
    };

    // Save draft manually
    const handleSaveDraft = () => {
        const draftData = {
            formData,
            ingredients,
            steps,
            uploadedImageUrl,
        };

        const success = saveDraft(draftData, 'create');
        if (success) {
            const timestamp = getDraftTimestamp('create');
            setDraftTimestamp(timestamp);
        }
    };

    // Handle image selection
    const handleImageChange = (e) => {
        const file = e.target.files[0];
        if (!file) return;

        // Validate file size (max 5MB)
        if (file.size > 5 * 1024 * 1024) {
            setError('Ukuran file maksimal 5MB');
            return;
        }

        // Validate file type
        const allowedTypes = ['image/jpeg', 'image/jpg',
            'image/png', 'image/webp'];
        if (!allowedTypes.includes(file.type)) {
            setError('Format file harus .jpg, .jpeg, .png, atau .webp');
            return;
        }

        setImageFile(file);
        setImagePreview(URL.createObjectURL(file));
        setError('');
    };

    // Upload image to server
    const handleUploadImage = async () => {
        if (!imageFile) {
            setError('Pilih gambar terlebih dahulu');
            return;
        }

        try {
            setUploading(true);
            setError('');

```

```

        const uploadResult = await
uploadService.uploadImage(imageFile);

        if (uploadResult.success) {
            setUploadedImageUrl(uploadResult.data.url);
            setCurrentStep('form');
            alert('✅ Gambar berhasil diupload! Silakan isi
form resep.');
```

```

        } else {
            throw new Error(uploadResult.error || 'Gagal
upload gambar');
        }
    } catch (err) {
        setError(err.message || 'Gagal mengupload gambar');
    } finally {
        setUploading(false);
    }
};

// Change uploaded image
const handleChangeImage = () => {
    setCurrentStep('upload');
    setImageFile(null);
    setImagePreview(null);
    setUploadedImageUrl('');
    if (imagePreview) {
        URL.revokeObjectURL(imagePreview);
    }
};

// Remove image
const handleRemoveImage = () => {
    setImageFile(null);
    setImagePreview(null);
    if (imagePreview) {
        URL.revokeObjectURL(imagePreview);
    }
};

// Handle form field changes
const handleChange = (e) => {
    const { name, value, type, checked } = e.target;
    setFormData(prev => ({
        ...prev,
        [name]: type === 'checkbox' ? checked : value
    }));
};

// Handle ingredient changes
const handleIngredientChange = (index, field, value) => {
    {
        const newIngredients = [...ingredients];
        newIngredients[index][field] = value;
        setIngredients(newIngredients);
    }
};

```

```

const addIngredient = () => {
  setIngredients([...ingredients, { name: '', quantity:
'' }]);
};

const removeIngredient = (index) => {
  if (ingredients.length > 1) {
    setIngredients(ingredients.filter((_, i) => i !==
index));
  }
};

// Handle step changes
const handleStepChange = (index, value) => {
  const newSteps = [...steps];
  newSteps[index] = value;
  setSteps(newSteps);
};

const addStep = () => {
  setSteps([...steps, '']);
};

const removeStep = (index) => {
  if (steps.length > 1) {
    setSteps(steps.filter((_, i) => i !== index));
  }
};

// Validate form
const validateForm = () => {
  if (!formData.name.trim()) {
    setError('Nama resep wajib diisi');
    return false;
  }

  if (formData.name.trim().length < 3) {
    setError('Nama resep minimal 3 karakter');
    return false;
  }

  if (!formData.prep_time || formData.prep_time <= 0) {
    setError('Waktu persiapan harus lebih dari 0');
    return false;
  }

  if (!formData.cook_time || formData.cook_time <= 0) {
    setError('Waktu memasak harus lebih dari 0');
    return false;
  }

  if (!formData.servings || formData.servings <= 0) {
    setError('Jumlah porsi harus lebih dari 0');
    return false;
  }
}

```



```

// Validate ingredients
const validIngredients = ingredients.filter(ing =>
ing.name.trim() && ing.quantity.trim());
if (validIngredients.length === 0) {
  setError('Minimal harus ada 1 bahan');
  return false;
}

// Validate steps
const validSteps = steps.filter(step => step.trim());
if (validSteps.length === 0) {
  setError('Minimal harus ada 1 langkah');
  return false;
}

return true;
};

// Submit form
const handleSubmit = async (e) => {
  e.preventDefault();
  setError('');

  if (!uploadedImageUrl) {
    setError('Gambar harus diupload terlebih dahulu');
    return;
  }

  if (!validateForm()) {
    return;
  }

  try {
    setCreating(true);

    // Prepare recipe data with uploaded image URL
    const validIngredients = ingredients.filter(ing =>
ing.name.trim() && ing.quantity.trim());
    const validSteps = steps.filter(step =>
step.trim());

    const recipeData = {
      name: formData.name.trim(),
      category: formData.category,
      description: formData.description.trim(),
      image_url: uploadedImageUrl, // Use uploaded
image URL
      prep_time: parseInt(formData.prep_time),
      cook_time: parseInt(formData.cook_time),
      servings: parseInt(formData.servings),
      difficulty: formData.difficulty,
      is_featured: formData.is_featured,
      ingredients: validIngredients,
      steps: validSteps,
    };
  }
};

```

```

// Create recipe
const result = await
recipeService.createRecipe(recipeData);

    if (result.success) {
        alert('Resep berhasil dibuat!');
        deleteDraft('create'); // Clear draft after
successful creation
        if (onSuccess) {
            onSuccess(result.data);
        } else if (onBack) {
            onBack();
        }
    } else {
        throw new Error(result.message || 'Gagal membuat
resep');
    }
    } catch (err) {
        setError(err.message || 'Terjadi kesalahan saat
membuat resep');
    } finally {
        setCreating(false);
        setUploading(false);
    }
};

return (
    <div className="min-h-screen bg-linear-to-br from-
blue-50 via-white to-indigo-50 pb-20 md:pb-8">
        {/* Draft Modal */}
        <ConfirmModal
            isOpen={showDraftModal}
            onClose={handleDiscardDraft}
            onConfirm={handleLoadDraft}
            title="Draft Ditemukan"
            message={`Anda memiliki draft yang disimpan
${draftTimestamp ? formatDraftTime(draftTimestamp) : ''}.
Apakah Anda ingin melanjutkan draft tersebut`}
            confirmText="Muat Draft"
            cancelText="Mulai Baru"
            variant="info"
        />

        {/* Header */}
        <div className="sticky top-0 z-10 bg-white/80
backdrop-blur-md border-b border-slate-200 shadow-sm">
            <div className="max-w-4xl mx-auto px-4 py-4 flex
items-center justify-between">
                <button
                    onClick={onBack}
                    className="flex items-center gap-2 text-
slate-700 hover:text-slate-900 transition-colors"
                >
                    <ArrowLeft className="w-5 h-5" />
                    <span className="font-medium">Kembali</span>
                </button>

```

```

        { /* Draft Info & Save Button */
        <div className="flex items-center gap-3">
            {draftTimestamp && (
                <div className="hidden md:flex items-center gap-2 text-sm text-slate-500">
                    <Save className="w-4 h-4" />
                    <span>Tersimpan
                    {formatDraftTime(draftTimestamp)}</span>
                </div>
            )}
            <button
                onClick={handleSaveDraft}
                className="flex items-center gap-2 px-3 py-2 text-slate-700 hover:bg-slate-100 rounded-lg transition-colors"
                title="Simpan draft"
            >
                <Save className="w-5 h-5" />
                <span className="hidden md:inline text-sm">Simpan Draft</span>
            </button>
        </div>
    </div>
</div>

    <main className="max-w-4xl mx-auto px-4 py-8">
        <div className="bg-white/60 backdrop-blur-sm rounded-3xl p-6 md:p-8 shadow-xl border border-white/40">
            <h1 className="text-3xl font-bold text-slate-800 mb-2">Buat Resep Baru</h1>
            <div className="flex items-center justify-between mb-6">
                <p className="text-slate-600">Bagikan resep favoritmu dengan komunitas</p>
                {autoSaveEnabled && currentStep === 'form' && (
                    <div className="flex items-center gap-2 text-sm text-green-600">
                        <AlertCircle className="w-4 h-4" />
                        <span>Auto-save aktif</span>
                    </div>
                )}
            </div>

            { /* Step Indicator */
            <div className="mb-8 flex items-center justify-center gap-4">
                <div className={`flex items-center gap-2 ${currentStep === 'upload' ? 'text-blue-600' : 'text-green-600'}`}>
                    <div className={`w-8 h-8 rounded-full flex items-center justify-center font-bold ${currentStep === 'upload' ? 'bg-blue-600 text-white' : 'bg-green-600 text-white'}`}>

```

```

        {currentStep === 'form' ? <CheckCircle
className="w-5 h-5" /> : '1'}
      </div>
      <span className="font-medium">Upload
Gambar</span>
    </div>
    <div className={`h-1 w-16 ${currentStep ===
'form' ? 'bg-green-600' : 'bg-slate-300'}}`></div>
    <div className={`flex items-center gap-2
${currentStep === 'form' ? 'text-blue-600' : 'text-slate-
400'}}`>
      <div className={`w-8 h-8 rounded-full flex
items-center justify-center font-bold ${
currentStep === 'form' ? 'bg-blue-600
text-white' : 'bg-slate-300 text-slate-600'
}}`>
        2
      </div>
      <span className="font-medium">Isi
Form</span>
    </div>
  </div>

  {/* Error Message */}
  {error && (
    <div className="mb-6 bg-red-50 border border-
red-200 rounded-xl p-4">
      <p className="text-red-600 text-
sm">{error}</p>
    </div>
  )}

  {/* STEP 1: Image Upload */}
  {currentStep === 'upload' && (
    <div className="space-y-6">
      <div className="text-center mb-6">
        <h2 className="text-xl font-bold text-
slate-800 mb-2">Upload Foto Resep</h2>
        <p className="text-slate-600">Gambar
harus diupload terlebih dahulu sebelum mengisi form</p>
      </div>

      {!imagePreview ? (
        <div className="border-2 border-dashed
border-slate-300 rounded-xl p-12 text-center
hover:border-blue-400 transition-colors">
          <input
            type="file"

accept="image/jpeg,image/jpg,image/png,image/webp"
            onChange={handleImageChange}
            className="hidden"
            id="image-upload"
          />
          <label
            htmlFor="image-upload"

```

```

        className="cursor-pointer flex flex-
col items-center gap-4"
      >
        <div className="w-20 h-20 bg-blue-100
rounded-full flex items-center justify-center">
          <ImageIcon className="w-10 h-10
text-blue-600" />
        </div>
        <div>
          <p className="text-lg text-slate-
700 font-medium">Klik untuk pilih foto</p>
          <p className="text-sm text-slate-
500 mt-2">
            Maksimal 5MB (.jpg, .jpeg, .png,
.webp)
          </p>
        </div>
      </label>
    </div>
  ) : (
    <div className="space-y-4">
      <div className="relative">
        <img
          src={imagePreview}
          alt="Preview"
          className="w-full h-80 object-cover
rounded-xl shadow-lg"
        />
        <button
          type="button"
          onClick={handleRemoveImage}
          className="absolute top-4 right-4
p-2 bg-red-500 text-white rounded-full hover:bg-red-600
transition-colors shadow-lg"
        >
          <X className="w-5 h-5" />
        </button>
      </div>
      <button
        type="button"
        onClick={handleUploadImage}
        disabled={uploading}
        className="w-full py-4 bg-gradient-
to-r from-blue-600 to-indigo-600 text-white font-semibold
rounded-xl hover:from-blue-700 hover:to-indigo-700
disabled:opacity-50 disabled:cursor-not-allowed
transition-all shadow-lg hover:shadow-xl flex items-
center justify-center gap-2"
      >
        {uploading ? (
          <>
            <Loader className="w-5 h-5
animate-spin" />
            <span>Mengupload...</span>
          </>
        ) : (

```

```

        ) : (
            <>
                <Upload className="w-5 h-5" />
                <span>Upload Gambar &
Lanjutkan</span>
            </>
        )}
    </button>
</div>
)}
</div>
)}

{/* STEP 2: Form Fields */}
{currentStep === 'form' && (
    <form onSubmit={handleSubmit}
className="space-y-8">
        {/* Uploaded Image Preview */}
        <div className="bg-green-50 border border-
green-200 rounded-xl p-4">
            <div className="flex items-center gap-4">
                <img
                    src={uploadedImageUrl}
                    alt="Uploaded"
                    className="w-24 h-24 object-cover
rounded-lg"
                />
                <div className="flex-1">
                    <div className="flex items-center
gap-2 text-green-700 font-medium mb-1">
                        <CheckCircle className="w-5 h-5" />
                        <span>Gambar berhasil
diupload</span>
                    </div>
                    <p className="text-sm text-slate-
600">Silakan isi form di bawah untuk melengkapi resep</p>
                    </div>
                    <button
                        type="button"
                        onClick={handleChangeImage}
                        className="px-4 py-2 text-blue-600
hover:bg-blue-50 rounded-lg transition-colors text-sm
font-medium"
                    >
                        Ganti Gambar
                    </button>
                </div>
            </div>

            {/* Basic Info */}
            <div className="grid md:grid-cols-2 gap-6">
                <div>
                    <label className="block text-sm font-
medium text-slate-700 mb-2">
                        Nama Resep <span className="text-red-
500">*</span>

```

```

        </label>
        <input
            type="text"
            name="name"
            value={formData.name}
            onChange={handleChange}
            placeholder="Nasi Goreng Spesial"
            className="w-full px-4 py-3 border
border-slate-300 rounded-xl focus:ring-2 focus:ring-blue-
500 focus:border-blue-500"
            required
        />
    </div>

    <div>
        <label className="block text-sm font-
medium text-slate-700 mb-2">
            Kategori <span className="text-red-
500">*</span>
        </label>
        <select
            name="category"
            value={formData.category}
            onChange={handleChange}
            className="w-full px-4 py-3 border
border-slate-300 rounded-xl focus:ring-2 focus:ring-blue-
500 focus:border-blue-500"
        >
            <option
value="makanan">Makanan</option>
            <option
value="minuman">Minuman</option>
        </select>
    </div>
</div>

    {/* Description */}
    <div>
        <label className="block text-sm font-medium
text-slate-700 mb-2">
            Deskripsi
        </label>
        <textarea
            name="description"
            value={formData.description}
            onChange={handleChange}
            placeholder="Ceritakan tentang resep
ini..."
            rows={4}
            className="w-full px-4 py-3 border
border-slate-300 rounded-xl focus:ring-2 focus:ring-blue-
500 focus:border-blue-500 resize-none"
        />
    </div>

    {/* Time & Servings */}

```

```

<div className="grid md:grid-cols-3 gap-6">
  <div>
    <label className="block text-sm font-
medium text-slate-700 mb-2">
      Waktu Persiapan (menit) <span
className="text-red-500">*</span>
    </label>
    <input
      type="number"
      name="prep_time"
      value={formData.prep_time}
      onChange={handleChange}
      placeholder="15"
      min="1"
      className="w-full px-4 py-3 border
border-slate-300 rounded-xl focus:ring-2 focus:ring-blue-
500 focus:border-blue-500"
      required
    />
  </div>

  <div>
    <label className="block text-sm font-
medium text-slate-700 mb-2">
      Waktu Memasak (menit) <span
className="text-red-500">*</span>
    </label>
    <input
      type="number"
      name="cook_time"
      value={formData.cook_time}
      onChange={handleChange}
      placeholder="20"
      min="1"
      className="w-full px-4 py-3 border
border-slate-300 rounded-xl focus:ring-2 focus:ring-blue-
500 focus:border-blue-500"
      required
    />
  </div>

  <div>
    <label className="block text-sm font-
medium text-slate-700 mb-2">
      Porsi (orang) <span className="text-
red-500">*</span>
    </label>
    <input
      type="number"
      name="servings"
      value={formData.servings}
      onChange={handleChange}
      placeholder="4"
      min="1"
    />
  </div>
</div>

```



```

        className="w-full px-4 py-3 border
border-slate-300 rounded-xl focus:ring-2 focus:ring-blue-
500 focus:border-blue-500"
        required
      />
    </div>
  </div>

  {/ * Difficulty */}
  <div>
    <label className="block text-sm font-medium
text-slate-700 mb-2">
      Tingkat Kesulitan <span className="text-
red-500">*</span>
    </label>
    <select
      name="difficulty"
      value={formData.difficulty}
      onChange={handleChange}
      className="w-full px-4 py-3 border
border-slate-300 rounded-xl focus:ring-2 focus:ring-blue-
500 focus:border-blue-500"
    >
      <option value="mudah">Mudah</option>
      <option value="sedang">Sedang</option>
      <option value="sulit">Sulit</option>
    </select>
  </div>

  {/ * Ingredients */}
  <div>
    <label className="block text-sm font-medium
text-slate-700 mb-3">
      Bahan-bahan <span className="text-red-
500">*</span>
    </label>
    <div className="space-y-3">
      {ingredients.map((ingredient, index) => (
        <div key={index} className="flex gap-
3">
          <input
            type="text"
            value={ingredient.name}
            onChange={(e) =>
handleIngredientChange(index, 'name', e.target.value)}
            placeholder="Nama bahan"
            className="flex-1 px-4 py-3 border
border-slate-300 rounded-xl focus:ring-2 focus:ring-blue-
500 focus:border-blue-500"
          />
          <input
            type="text"
            value={ingredient.quantity}
            onChange={(e) =>
handleIngredientChange(index, 'quantity',
e.target.value)}

```

```

                placeholder="Jumlah"
                className="w-32 px-4 py-3 border
border-slate-300 rounded-xl focus:ring-2 focus:ring-blue-
500 focus:border-blue-500"
            />
            <button
                type="button"
                onClick={() =>
removeIngredient(index)}
                disabled={ingredients.length === 1}
                className="p-3 text-red-600
hover:bg-red-50 rounded-xl transition-colors
disabled:opacity-50 disabled:cursor-not-allowed"
            >
                <X className="w-5 h-5" />
            </button>
        </div>
    )))
    <button
        type="button"
        onClick={addIngredient}
        className="w-full py-3 border-2 border-
dashed border-slate-300 rounded-xl text-slate-600
hover:border-blue-400 hover:text-blue-600 transition-
colors flex items-center justify-center gap-2"
    >
        <Plus className="w-5 h-5" />
        Tambah Bahan
    </button>
</div>
</div>

{/* Steps */}
<div>
    <label className="block text-sm font-medium
text-slate-700 mb-3">
        Langkah-langkah <span className="text-
red-500">*</span>
    </label>
    <div className="space-y-3">
        {steps.map((step, index) => (
            <div key={index} className="flex gap-
3">
                <div className="flex-shrink-0 w-10 h-
10 bg-blue-600 text-white rounded-full flex items-center
justify-center font-bold">
                    {index + 1}
                </div>
                <textarea
                    value={step}
                    onChange={(e) =>
handleStepChange(index, e.target.value)}
                    placeholder="Tulis langkah..."
                    rows={2}

```

```

        className="flex-1 px-4 py-3 border
border-slate-300 rounded-xl focus:ring-2 focus:ring-blue-
500 focus:border-blue-500 resize-none"
    />
    <button
        type="button"
        onClick={() => removeStep(index)}
        disabled={steps.length === 1}
        className="p-3 text-red-600
hover:bg-red-50 rounded-xl transition-colors
disabled:opacity-50 disabled:cursor-not-allowed self-
start"
    >
        <X className="w-5 h-5" />
    </button>
</div>
)))
<button
    type="button"
    onClick={addStep}
    className="w-full py-3 border-2 border-
dashed border-slate-300 rounded-xl text-slate-600
hover:border-blue-400 hover:text-blue-600 transition-
colors flex items-center justify-center gap-2"
    >
        <Plus className="w-5 h-5" />
        Tambah Langkah
    </button>
</div>
</div>

{/* Featured Toggle */}
<div className="flex items-center gap-3 bg-
blue-50 p-4 rounded-xl">
    <input
        type="checkbox"
        id="is_featured"
        name="is_featured"
        checked={formData.is_featured}
        onChange={handleChange}
        className="w-5 h-5 text-blue-600 rounded
focus:ring-2 focus:ring-blue-500"
    />
    <label htmlFor="is_featured"
className="text-sm text-slate-700 cursor-pointer">
        Tandai sebagai resep unggulan
    </label>
</div>

{/* Submit Buttons */}
<div className="flex flex-col md:flex-row
gap-4 pt-6">
    <button
        type="button"
        onClick={onBack}
        disabled={creating}

```



```

        is_featured: false,
    });

    const [currentImageUrl, setCurrentImageUrl] =
useState('');
    const [imageFile, setImageFile] = useState(null);
    const [imagePreview, setImagePreview] = useState(null);
    const [ingredients, setIngredients] = useState([{ name:
'', quantity: '' }]);
    const [steps, setSteps] = useState(['']);

    const [uploading, setUploading] = useState(false);
    const [updating, setUpdating] = useState(false);
    const [error, setError] = useState('');

    // Load recipe data
    useEffect(() => {
        const loadRecipe = async () => {
            try {
                setLoading(true);
                const result = await
recipeService.getRecipeById(recipeId);

                if (result.success) {
                    const recipe = result.data;
                    setFormData({
                        name: recipe.name || '',
                        category: recipe.category || 'makanan',
                        description: recipe.description || '',
                        prep_time: recipe.prep_time || '',
                        cook_time: recipe.cook_time || '',
                        servings: recipe.servings || '',
                        difficulty: recipe.difficulty || 'mudah',
                        is_featured: recipe.is_featured || false,
                    });

                    setCurrentImageUrl(recipe.image_url || '');
                    setIngredients(recipe.ingredients &&
recipe.ingredients.length > 0
                        ? recipe.ingredients
                        : [{ name: '', quantity: '' }])
                    );

                    // Convert steps to array of strings if they're
objects
                    let stepsArray = [''];
                    if (recipe.steps && recipe.steps.length > 0) {
                        stepsArray = recipe.steps.map(step => {
                            // If step is an object with a 'step'
property, extract it
                            if (typeof step === 'object' && step.step)
{
                                return step.step;
                            }
                            // If step is already a string, use it

```

```

        return typeof step === 'string' ? step :
    '';

        });
    }
    setSteps(stepsArray);
} else {
    throw new Error('Gagal memuat data resep');
}
} catch (err) {
    setError(err.message || 'Terjadi kesalahan saat
memuat resep');
} finally {
    setLoading(false);
}
}
};

if (recipeId) {
    loadRecipe();
}
}, [recipeId]);

// Handle image selection
const handleImageChange = (e) => {
    const file = e.target.files[0];
    if (!file) return;

    // Validate file size (max 5MB)
    if (file.size > 5 * 1024 * 1024) {
        setError('Ukuran file maksimal 5MB');
        return;
    }

    // Validate file type
    const allowedTypes = ['image/jpeg', 'image/jpg',
'image/png', 'image/webp'];
    if (!allowedTypes.includes(file.type)) {
        setError('Format file harus .jpg, .jpeg, .png, atau
.webp');
        return;
    }

    setImageFile(file);
    setImagePreview(URL.createObjectURL(file));
    setError('');
};

// Remove new image (revert to original)
const handleRemoveNewImage = () => {
    setImageFile(null);
    setImagePreview(null);
    if (imagePreview) {
        URL.revokeObjectURL(imagePreview);
    }
};

// Remove original image

```

```

const handleRemoveOriginalImage = () => {
  setCurrentImageUrl('');
};

// Handle form field changes
const handleChange = (e) => {
  const { name, value, type, checked } = e.target;
  setFormData(prev => ({
    ...prev,
    [name]: type === 'checkbox' ? checked : value
  }));
};

// Handle ingredient changes
const handleIngredientChange = (index, field, value) => {
  const newIngredients = [...ingredients];
  newIngredients[index][field] = value;
  setIngredients(newIngredients);
};

const addIngredient = () => {
  setIngredients([...ingredients, { name: '', quantity:
  '' }]);
};

const removeIngredient = (index) => {
  if (ingredients.length > 1) {
    setIngredients(ingredients.filter((_, i) => i !==
index));
  }
};

// Handle step changes
const handleStepChange = (index, value) => {
  const newSteps = [...steps];
  newSteps[index] = value;
  setSteps(newSteps);
};

const addStep = () => {
  setSteps([...steps, '']);
};

const removeStep = (index) => {
  if (steps.length > 1) {
    setSteps(steps.filter((_, i) => i !== index));
  }
};

// Validate form
const validateForm = () => {
  if (!formData.name.trim()) {
    setError('Nama resep wajib diisi');
    return false;
  }
}

```

```

    if (formData.name.trim().length < 3) {
      setError('Nama resep minimal 3 karakter');
      return false;
    }

    if (!formData.prep_time || formData.prep_time <= 0) {
      setError('Waktu persiapan harus lebih dari 0');
      return false;
    }

    if (!formData.cook_time || formData.cook_time <= 0) {
      setError('Waktu memasak harus lebih dari 0');
      return false;
    }

    if (!formData.servings || formData.servings <= 0) {
      setError('Jumlah porsi harus lebih dari 0');
      return false;
    }

    // Validate ingredients
    const validIngredients = ingredients.filter(ing =>
ing.name.trim() && ing.quantity.trim());
    if (validIngredients.length === 0) {
      setError('Minimal harus ada 1 bahan');
      return false;
    }

    // Validate steps
    const validSteps = steps.filter(step => {
      // Ensure step is a string before calling trim
      if (typeof step === 'string') {
        return step.trim();
      }
      // If step is an object, check if it has a 'step'
property
      if (typeof step === 'object' && step.step) {
        return step.step.trim();
      }
      return false;
    });
    if (validSteps.length === 0) {
      setError('Minimal harus ada 1 langkah');
      return false;
    }

    return true;
  };

  // Submit form (PATCH - partial update)
  const handleSubmit = async (e) => {
    e.preventDefault();
    setError('');

    if (!validateForm()) {

```



```

    return;
  }

  try {
    setUpdating(true);

    // Prepare update data
    const updateData = {};

    // Step 1: Upload new image if selected
    if (imageFile) {
      setUploading(true);
      const uploadResult = await
uploadService.uploadImage(imageFile);
      if (uploadResult.success) {
        updateData.image_url = uploadResult.data.url;
      } else {
        throw new Error('Gagal upload gambar');
      }
      setUploading(false);
    } else if (!currentImageUrl && !imageFile) {
      // If original image was removed and no new image
      updateData.image_url = '';
    }

    // Step 2: Add other fields
    const validIngredients = ingredients.filter(ing =>
ing.name.trim() && ing.quantity.trim());
    const validSteps = steps.filter(step => {
      if (typeof step === 'string') {
        return step.trim();
      }
      if (typeof step === 'object' && step.step) {
        return step.step.trim();
      }
      return false;
    }).map(step => {
      // Convert to string if it's an object
      if (typeof step === 'object' && step.step) {
        return step.step;
      }
      return step;
    });

    updateData.name = formData.name.trim();
    updateData.category = formData.category;
    updateData.description =
formData.description.trim();
    updateData.prep_time =
parseInt(formData.prep_time);
    updateData.cook_time =
parseInt(formData.cook_time);
    updateData.servings = parseInt(formData.servings);
    updateData.difficulty = formData.difficulty;
    updateData.is_featured = formData.is_featured;
    updateData.ingredients = validIngredients;
  }

```

```

        updateData.steps = validSteps;

        // Step 3: Update recipe using PUT
        const result = await
recipeService.updateRecipe(recipeId, updateData);

        if (result.success) {
            alert('Resep berhasil diperbarui!');
            if (onSuccess) {
                onSuccess(result.data);
            } else if (onBack) {
                onBack();
            }
        } else {
            throw new Error(result.message || 'Gagal
memperbarui resep');
        }
    } catch (err) {
        setError(err.message || 'Terjadi kesalahan saat
memperbarui resep');
    } finally {
        setUpdating(false);
        setUploading(false);
    }
};

if (loading) {
    return (
        <div className="min-h-screen bg-gradient-to-br
from-blue-50 via-white to-indigo-50 flex items-center
justify-center">
            <div className="text-center">
                <Loader className="w-12 h-12 text-blue-600
animate-spin mx-auto mb-4" />
                <p className="text-slate-600">Memuat data
resep...</p>
            </div>
        </div>
    );
}

return (
    <div className="min-h-screen bg-gradient-to-br from-
blue-50 via-white to-indigo-50 pb-20 md:pb-8">
        </* Header */>
        <div className="sticky top-0 z-10 bg-white/80
backdrop-blur-md border-b border-slate-200 shadow-sm">
            <div className="max-w-4xl mx-auto px-4 py-4">
                <button
                    onClick={onBack}
                    className="flex items-center gap-2 text-
slate-700 hover:text-slate-900 transition-colors"
                >
                    <ArrowLeft className="w-5 h-5" />
                    <span className="font-medium">Kembali</span>
                </button>
            </div>
        </div>
    </div>
);

```

```

    </div>
  </div>

  <main className="max-w-4xl mx-auto px-4 py-8">
    <div className="bg-white/60 backdrop-blur-sm
rounded-3xl p-6 md:p-8 shadow-xl border border-white/40">
      <h1 className="text-3xl font-bold text-slate-
800 mb-2">Edit Resep</h1>
      <p className="text-slate-600 mb-8">Perbarui
informasi resepmu</p>

      {/* Error Message */}
      {error && (
        <div className="mb-6 bg-red-50 border border-
red-200 rounded-xl p-4">
          <p className="text-red-600 text-
sm">{error}</p>
        </div>
      )}

      <form onSubmit={handleSubmit} className="space-
y-8">
        {/* Image Upload */}
        <div>
          <label className="block text-sm font-medium
text-slate-700 mb-3">
            Foto Resep
          </label>

          {/* Show new image preview if selected */}
          {imagePreview ? (
            <div className="relative">
              <img
                src={imagePreview}
                alt="Preview"
                className="w-full h-64 object-cover
rounded-xl"
              />
              <button
                type="button"
                onClick={handleRemoveNewImage}
                className="absolute top-4 right-4 p-2
bg-red-500 text-white rounded-full hover:bg-red-600
transition-colors shadow-lg"
              >
                <X className="w-5 h-5" />
              </button>
              <div className="absolute bottom-4 left-
4 px-3 py-1 bg-blue-600 text-white text-sm rounded-full">
                Gambar Baru
              </div>
            </div>
          ) : currentImageUrl &&
currentImageUrl.trim() !== '' ? (
            {/* Show current image */}
            <div className="relative">

```

```

<img
  src={currentImageUrl}
  alt="Current"
  className="w-full h-64 object-cover
rounded-xl"
/>
<button
  type="button"
  onClick={handleRemoveOriginalImage}
  className="absolute top-4 right-4 p-2
bg-red-500 text-white rounded-full hover:bg-red-600
transition-colors shadow-lg"
>
  <X className="w-5 h-5" />
</button>
<div className="absolute bottom-4 left-
4">
  <input
    type="file"
    accept="image/jpeg,image/jpg,image/png,image/webp"
    onChange={handleImageChange}
    className="hidden"
    id="image-change"
  />
  <label
    htmlFor="image-change"
    className="px-4 py-2 bg-white/90
backdrop-blur-sm text-slate-700 rounded-full hover:bg-
white transition-colors cursor-pointer text-sm font-
medium shadow-lg inline-flex items-center gap-2"
  >
    <Upload className="w-4 h-4" />
    Ganti Gambar
  </label>
</div>
</div>
) : (
  /* No image - show upload area */
  <div className="border-2 border-dashed
border-slate-300 rounded-xl p-8 text-center hover:border-
blue-400 transition-colors">
    <input
      type="file"
      accept="image/jpeg,image/jpg,image/png,image/webp"
      onChange={handleImageChange}
      className="hidden"
      id="image-upload"
    />
    <label
      htmlFor="image-upload"
      className="cursor-pointer flex flex-
col items-center gap-3"
    >

```



```

        <option
value="minuman">Minuman</option>
        </select>
    </div>
</div>

    { /* Description */ }
    <div>
        <label className="block text-sm font-medium
text-slate-700 mb-2">
            Deskripsi
        </label>
        <textarea
            name="description"
            value={formData.description}
            onChange={handleChange}
            placeholder="Ceritakan tentang resep
ini..."
            rows={4}
            className="w-full px-4 py-3 border
border-slate-300 rounded-xl focus:ring-2 focus:ring-blue-
500 focus:border-blue-500 resize-none"
        />
    </div>

    { /* Time & Servings */ }
    <div className="grid md:grid-cols-3 gap-6">
        <div>
            <label className="block text-sm font-
medium text-slate-700 mb-2">
                Waktu Persiapan (menit) <span
className="text-red-500">*</span>
            </label>
            <input
                type="number"
                name="prep_time"
                value={formData.prep_time}
                onChange={handleChange}
                placeholder="15"
                min="1"
                className="w-full px-4 py-3 border
border-slate-300 rounded-xl focus:ring-2 focus:ring-blue-
500 focus:border-blue-500"
                required
            />
        </div>

        <div>
            <label className="block text-sm font-
medium text-slate-700 mb-2">
                Waktu Memasak (menit) <span
className="text-red-500">*</span>
            </label>
            <input
                type="number"
                name="cook_time"

```

```

        value={formData.cook_time}
        onChange={handleChange}
        placeholder="20"
        min="1"
        className="w-full px-4 py-3 border
border-slate-300 rounded-xl focus:ring-2 focus:ring-blue-
500 focus:border-blue-500"
        required
      />
    </div>

    <div>
      <label className="block text-sm font-
medium text-slate-700 mb-2">
        Porsi (orang) <span className="text-
red-500">*</span>
      </label>
      <input
        type="number"
        name="servings"
        value={formData.servings}
        onChange={handleChange}
        placeholder="4"
        min="1"
        className="w-full px-4 py-3 border
border-slate-300 rounded-xl focus:ring-2 focus:ring-blue-
500 focus:border-blue-500"
        required
      />
    </div>
  </div>

  {/* Difficulty */}
  <div>
    <label className="block text-sm font-medium
text-slate-700 mb-2">
      Tingkat Kesulitan <span className="text-
red-500">*</span>
    </label>
    <select
      name="difficulty"
      value={formData.difficulty}
      onChange={handleChange}
      className="w-full px-4 py-3 border
border-slate-300 rounded-xl focus:ring-2 focus:ring-blue-
500 focus:border-blue-500"
    >
      <option value="mudah">Mudah</option>
      <option value="sedang">Sedang</option>
      <option value="sulit">Sulit</option>
    </select>
  </div>

  {/* Ingredients */}
  <div>

```

```

        <label className="block text-sm font-medium
text-slate-700 mb-3">
          Bahan-bahan <span className="text-red-
500">*</span>
        </label>
        <div className="space-y-3">
          {ingredients.map((ingredient, index) => (
            <div key={index} className="flex gap-
3">
              <input
                type="text"
                value={ingredient.name}
                onChange={(e) =>
handleIngredientChange(index, 'name', e.target.value)}
                placeholder="Nama bahan"
                className="flex-1 px-4 py-3 border
border-slate-300 rounded-xl focus:ring-2 focus:ring-blue-
500 focus:border-blue-500"
              />
              <input
                type="text"
                value={ingredient.quantity}
                onChange={(e) =>
handleIngredientChange(index, 'quantity',
e.target.value)}
                placeholder="Jumlah"
                className="w-32 px-4 py-3 border
border-slate-300 rounded-xl focus:ring-2 focus:ring-blue-
500 focus:border-blue-500"
              />
              <button
                type="button"
                onClick={() =>
removeIngredient(index)}
                disabled={ingredients.length === 1}
                className="p-3 text-red-600
hover:bg-red-50 rounded-xl transition-colors
disabled:opacity-50 disabled:cursor-not-allowed"
              >
                <X className="w-5 h-5" />
              </button>
            </div>
          ))}
          <button
            type="button"
            onClick={addIngredient}
            className="w-full py-3 border-2 border-
dashed border-slate-300 rounded-xl text-slate-600
hover:border-blue-400 hover:text-blue-600 transition-
colors flex items-center justify-center gap-2"
          >
            <Plus className="w-5 h-5" />
            Tambah Bahan
          </button>
        </div>
      </div>

```



```

        { /* Steps */ }
        <div>
            <label className="block text-sm font-medium
text-slate-700 mb-3">
                Langkah-langkah <span className="text-
red-500">*</span>
            </label>
            <div className="space-y-3">
                {steps.map((step, index) => (
                    <div key={index} className="flex gap-
3">
                        <div className="shrink-0 w-10 h-10
bg-blue-600 text-white rounded-full flex items-center
justify-center font-bold">
                            {index + 1}
                        </div>
                        <textarea
                            value={step}
                            onChange={e =>
handleStepChange(index, e.target.value)}
                            placeholder="Tulis langkah..."
                            rows={2}
                            className="flex-1 px-4 py-3 border
border-slate-300 rounded-xl focus:ring-2 focus:ring-blue-
500 focus:border-blue-500 resize-none"
                        />
                        <button
                            type="button"
                            onClick={() => removeStep(index)}
                            disabled={steps.length === 1}
                            className="p-3 text-red-600
hover:bg-red-50 rounded-xl transition-colors
disabled:opacity-50 disabled:cursor-not-allowed self-
start"
                        >
                            <X className="w-5 h-5" />
                        </button>
                    </div>
                )
                )
            </div>
            <button
                type="button"
                onClick={addStep}
                className="w-full py-3 border-2 border-
dashed border-slate-300 rounded-xl text-slate-600
hover:border-blue-400 hover:text-blue-600 transition-
colors flex items-center justify-center gap-2"
            >
                <Plus className="w-5 h-5" />
                Tambah Langkah
            </button>
        </div>
    </div>

    { /* Featured Toggle */ }

```

```

<div className="flex items-center gap-3 bg-
blue-50 p-4 rounded-xl">
  <input
    type="checkbox"
    id="is_featured"
    name="is_featured"
    checked={formData.is_featured}
    onChange={handleChange}
    className="w-5 h-5 text-blue-600 rounded
focus:ring-2 focus:ring-blue-500"
  />
  <label htmlFor="is_featured"
className="text-sm text-slate-700 cursor-pointer">
    Tandai sebagai resep unggulan
  </label>
</div>

{/* Submit Buttons */}
<div className="flex flex-col md:flex-row
gap-4 pt-6">
  <button
    type="button"
    onClick={onBack}
    disabled={updating || uploading}
    className="flex-1 px-6 py-3 border
border-slate-300 text-slate-700 rounded-xl hover:bg-
slate-50 transition-colors font-medium disabled:opacity-
50 disabled:cursor-not-allowed"
  >
    Batal
  </button>
  <button
    type="submit"
    disabled={updating || uploading}
    className="flex-1 px-6 py-3 bg-blue-600
text-white rounded-xl hover:bg-blue-700 transition-colors
font-medium disabled:opacity-50 disabled:cursor-not-
allowed flex items-center justify-center gap-2"
  >
    {uploading ? (
      <>
        <Loader className="w-5 h-5 animate-
spin" />
        Uploading gambar...
      </>
    ) : updating ? (
      <>
        <Loader className="w-5 h-5 animate-
spin" />
        Memperbarui resep...
      </>
    ) : (
      'Simpan Perubahan'
    )}
  </button>
</div>

```

```

        </form>
      </div>
    </main>
  </div>
);
}

```

HomePage.jsx

```

// src/pages/HomePage.jsx
import { useRecipes } from '../hooks/useRecipes';
import HeroSection from '../components/home/HeroSection';
import FeaturedMakananSection from
'../components/home/FeaturedMakananSection';
import FeaturedMinumanSection from
'../components/home/FeaturedMinumanSection';

export default function HomePage({ onRecipeClick,
onNavigate }) {
  // Fetch featured makanan (food) recipes from API
  const {
    recipes: featuredMakanan,
    loading: loadingMakanan,
    error: errorMakanan
  } = useRecipes({
    category: 'makanan',
    limit: 3,
    sort_by: 'created_at',
    order: 'desc'
  });

  // Fetch featured minuman (drinks) recipes from API
  const {
    recipes: featuredMinuman,
    loading: loadingMinuman,
    error: errorMinuman
  } = useRecipes({
    category: 'minuman',
    limit: 2,
    sort_by: 'created_at',
    order: 'desc'
  });

  return (
    <div className="min-h-screen bg-gradient-to-br from-
blue-50 via-white to-indigo-50">
      <HeroSection />

      <div className="max-w-7xl mx-auto px-4 sm:px-6
lg:px-8 py-12 space-y-16">
        {/* Featured Makanan Section */}
        <FeaturedMakananSection
          recipes={featuredMakanan}
          loading={loadingMakanan}
          error={errorMakanan}

```

```

        onRecipeClick={onRecipeClick}
        onNavigate={onNavigate}
      />

      {/* Featured Minuman Section */}
      <FeaturedMinumanSection
        recipes={featuredMinuman}
        loading={loadingMinuman}
        error={errorMinuman}
        onRecipeClick={onRecipeClick}
        onNavigate={onNavigate}
      />
    </div>
  </div>
);
}

```

MakananPage.jsx

```

// src/pages/MakananPage.jsx
import { useState } from 'react';
import { useRecipes } from '../hooks/useRecipes';
import RecipeGrid from
'../components/makanan/RecipeGrid';
import AdvancedFilter from
'../components/common/AdvancedFilter';

export default function MakananPage({ onRecipeClick }) {
  const [searchQuery, setSearchQuery] = useState('');
  const [filters, setFilters] = useState({
    difficulty: '',
    sortBy: 'created_at',
    order: 'desc',
    prepTimeMax: '',
  });
  const [page, setPage] = useState(1);

  // Fetch recipes from API with all filters
  const { recipes, loading, error, pagination, refetch } =
  useRecipes({
    category: 'makanan',
    search: searchQuery || undefined,
    difficulty: filters.difficulty || undefined,
    page,
    limit: 12,
    sort_by: filters.sortBy,
    order: filters.order
  });

  const handleSearchChange = (query) => {
    setSearchQuery(query);
    setPage(1); // Reset to first page on search
  };

```

```

const handleFilterChange = (newFilters) => {
  setFilters(newFilters);
  setPage(1); // Reset to first page on filter change
};

// Client-side filter for prep time (since API might
not support it)
const filteredRecipes = filters.prepTimeMax
  ? recipes.filter(recipe => recipe.prep_time <=
parseInt(filters.prepTimeMax))
  : recipes;

return (
  <div className="min-h-screen bg-linear-to-br from-
blue-50 via-white to-indigo-50 pb-20 md:pb-8">
    <main className="max-w-7xl mx-auto px-4 md:px-8 py-
8 md:py-12">
      {/* Header */}
      <div className="mb-8 text-center">
        <h1 className="text-3xl md:text-5xl font-bold
text-slate-800 mb-4">
          Resep Makanan
        </h1>
        <p className="text-slate-600 max-w-2xl mx-
auto">
          Temukan berbagai resep makanan nusantara yang
lezat
        </p>
      </div>

      {/* Advanced Filter */}
      <AdvancedFilter
        onSearchChange={handleSearchChange}
        onFilterChange={handleFilterChange}
        initialFilters={{ ...filters, search:
searchQuery }}
      />

      {/* Loading State */}
      {loading && (
        <div className="text-center py-12">
          <div className="animate-spin rounded-full h-
12 w-12 border-b-2 border-indigo-600 mx-auto"></div>
          <p className="mt-4 text-gray-600">Memuat
resep...</p>
        </div>
      )}

      {/* Error State */}
      {error && (
        <div className="text-center py-12">
          <div className="bg-red-50 border border-red-
200 rounded-lg p-6">
            <p className="text-red-600 font-semibold
mb-2">Terjadi Kesalahan</p>
            <p className="text-red-500">{error}</p>

```

```

        <button
            onClick={refetch}
            className="mt-4 px-4 py-2 bg-red-600
text-white rounded-lg hover:bg-red-700"
        >
            Coba Lagi
        </button>
    </div>
</div>
)}}

{/* Recipes Grid */}
{!loading && !error && (
    <>
        {filteredRecipes.length === 0 ? (
            <div className="text-center py-12">
                <p className="text-gray-600 text-lg">
                    Tidak ada resep ditemukan
                </p>
                <p className="text-gray-500 mt-2">
                    Coba ubah filter atau kata kunci
                </p>
            </div>
        ) : (
            <RecipeGrid recipes={filteredRecipes}
onRecipeClick={onRecipeClick} />
        )}

        {/* Pagination */}
        {pagination && pagination.total_pages > 1 &&
        (
            <div className="mt-12 flex flex-col
md:flex-row items-center justify-center gap-4">
                <button
                    onClick={() => setPage(p => Math.max(1,
p - 1))}
                    disabled={page === 1}
                    className="px-6 py-3 bg-white/80
backdrop-blur border border-slate-300 rounded-xl
hover:bg-blue-50 hover:border-blue-400 disabled:opacity-
50 disabled:cursor-not-allowed transition-all font-medium
text-slate-700"
                >
                    ← Sebelumnya
                </button>

                <div className="flex flex-col md:flex-row
items-center gap-2 bg-white/60 backdrop-blur px-4 py-2
rounded-xl border border-white/40">
                    <span className="text-slate-700 font-
semibold">
                        Halaman {pagination.page} dari
{pagination.total_pages}
                    </span>

```

```

        <span className="text-slate-500 text-sm">
            ({pagination.total} resepe)
        </span>
    </div>

    <button
        onClick={() => setPage(p => p + 1)}
        disabled={page ===
pagination.total_pages}
        className="px-6 py-3 bg-white/80
backdrop-blur border border-slate-300 rounded-xl
hover:bg-blue-50 hover:border-blue-400 disabled:opacity-
50 disabled:cursor-not-allowed transition-all font-medium
text-slate-700"
    >
        Selanjutnya →
    </button>
</div>
    )}
</>
    )}
</main>
</div>
    );
}

```

MinumanPage.jsx

```

// src/pages/MinumanPage.jsx
import { useState } from 'react';
import { useRecipes } from '../hooks/useRecipes';
import RecipeGrid from
'../components/minuman/RecipeGrid';
import AdvancedFilter from
'../components/common/AdvancedFilter';

export default function MinumanPage({ onRecipeClick }) {
    const [searchQuery, setSearchQuery] = useState('');
    const [filters, setFilters] = useState({
        difficulty: '',
        sortBy: 'created_at',
        order: 'desc',
        prepTimeMax: '',
    });
    const [page, setPage] = useState(1);

    // Fetch recipes from API with all filters
    const { recipes, loading, error, pagination, refetch } =
useRecipes({
        category: 'minuman',
        search: searchQuery || undefined,
        difficulty: filters.difficulty || undefined,
        page,
    });
}

```

```

    limit: 12,
    sort_by: filters.sortBy,
    order: filters.order
  });

  const handleSearchChange = (query) => {
    setSearchQuery(query);
    setPage(1); // Reset to first page on search
  };

  const handleFilterChange = (newFilters) => {
    setFilters(newFilters);
    setPage(1); // Reset to first page on filter change
  };

  // Client-side filter for prep time (since API might
  not support it)
  const filteredRecipes = filters.prepTimeMax
    ? recipes.filter(recipe => recipe.prep_time <=
      parseInt(filters.prepTimeMax))
    : recipes;

  return (
    <div className="min-h-screen bg-linear-to-br from-
      green-50 via-white to-cyan-50 pb-20 md:pb-8">
      <main className="max-w-7xl mx-auto px-4 md:px-8 py-
        8 md:py-12">
        {/* Header */}
        <div className="mb-8 text-center">
          <h1 className="text-3xl md:text-5xl font-bold
            text-slate-800 mb-4">
            Resep Minuman
          </h1>
          <p className="text-slate-600 max-w-2xl mx-
            auto">
            Temukan berbagai resep minuman segar dan
            nikmat
          </p>
        </div>

        {/* Advanced Filter */}
        <AdvancedFilter
          onSearchChange={handleSearchChange}
          onFilterChange={handleFilterChange}
          initialFilters={{ ...filters, search:
            searchQuery }}
        />

        {/* Loading State */}
        {loading && (
          <div className="text-center py-12">
            <div className="animate-spin rounded-full h-
              12 w-12 border-b-2 border-green-600 mx-auto"></div>
            <p className="mt-4 text-slate-600">Memuat
              resep...</p>
          </div>
        )}
      </main>
    </div>
  );

```



```

    })

    { /* Error State */
    {error && (
      <div className="text-center py-12">
        <div className="bg-red-50 border border-red-
200 rounded-lg p-6">
          <p className="text-red-600 font-semibold
mb-2">Terjadi Kesalahan</p>
          <p className="text-red-500">{error}</p>
          <button
            onClick={refetch}
            className="mt-4 px-4 py-2 bg-red-600
text-white rounded-lg hover:bg-red-700"
          >
            Coba Lagi
          </button>
        </div>
      </div>
    )}

    { /* Recipes Grid */
    {!loading && !error && (
      <>
        {recipes.length === 0 ? (
          <div className="text-center py-12">
            <p className="text-gray-600 text-lg">
              Tidak ada resep ditemukan
            </p>
            <p className="text-gray-500 mt-2">
              Coba ubah filter atau kata kunci
pencarian
            </p>
          </div>
        ) : (
          <RecipeGrid recipes={filteredRecipes}
onRecipeClick={onRecipeClick} />
        )}

        { /* Pagination */
        {pagination && pagination.total_pages > 1 &&
(
          <div className="mt-12 flex flex-col
md:flex-row items-center justify-center gap-4">
            <button
              onClick={() => setPage(p => Math.max(1,
p - 1))}
              disabled={page === 1}
              className="px-6 py-3 bg-white/80
backdrop-blur border border-slate-300 rounded-xl
hover:bg-green-50 hover:border-green-400
disabled:opacity-50 disabled:cursor-not-allowed
transition-all font-medium text-slate-700"
            >
              ← Sebelumnya
            </button>

```

```

        <div className="flex flex-col md:flex-row
items-center gap-2 bg-white/60 backdrop-blur px-4 py-2
rounded-xl border border-white/40">
            <span className="text-slate-700 font-
semibold">
                Halaman {pagination.page} dari
{pagination.total_pages}
            </span>
            <span className="text-slate-500 text-
sm">
                ({pagination.total} resep)
            </span>
        </div>

        <button
            onClick={() => setPage(p => p + 1)}
            disabled={page ===
pagination.total_pages}
            className="px-6 py-3 bg-white/80
backdrop-blur border border-slate-300 rounded-xl
hover:bg-green-50 hover:border-green-400
disabled:opacity-50 disabled:cursor-not-allowed
transition-all font-medium text-slate-700"
        >
            Selanjutnya →
        </button>
    </div>
    )}
</>
    )}
</main>
</div>
);
}

```

ProfilePage.jsx

```

// src/pages/ProfilePage.jsx
export default function ProfilePage() {
    return (
        <div className="p-4 md:p-8 pb-20 md:pb-8">
            <div className="max-w-7xl mx-auto">
                <h1 className="text-2xl md:text-3xl font-bold
text-gray-800 mb-6">
                    Profile Pengguna
                </h1>
                <div className="bg-white rounded-lg shadow-lg p-
6">
                    <p className="text-gray-600">
                        Konten halaman profile akan diisi di sini...
                    </p>
                </div>
            </div>
        </div>
    );
}

```

```
);  
}
```

SplashScreen.jsx

```
// src/pages/SplashScreen.jsx  
import React, { useState, useEffect } from 'react';  
import BackgroundPattern from  
  '../components/splash/BackgroundPattern';  
import FloatingElements from  
  '../components/splash/FloatingElements';  
import LogoContainer from  
  '../components/splash/LogoContainer';  
import TitleSection from  
  '../components/splash/TitleSection';  
import LoadingAnimation from  
  '../components/splash/LoadingAnimation';  
import Footer from '../components/splash/Footer';  
  
export default function SplashScreen({ onComplete }) {  
  const [progress, setProgress] = useState(0);  
  const [isVisible, setIsVisible] = useState(true);  
  const [fadeIn, setFadeIn] = useState(false);  
  const [fadeOut, setFadeOut] = useState(false);  
  
  useEffect(() => {  
    setTimeout(() => {  
      setFadeIn(true);  
    }, 100);  
  
    const interval = setInterval(() => {  
      setProgress((prev) => {  
        if (prev >= 100) {  
          clearInterval(interval);  
          setTimeout(() => {  
            setFadeOut(true);  
            setTimeout(() => {  
              setIsVisible(false);  
              setTimeout(() => {  
                if (typeof onComplete === 'function')  
onComplete();  
                }, 100);  
              }, 600);  
            }, 800);  
            return 100;  
          }  
          const nextProgress = prev + 6;  
          return nextProgress > 100 ? 100 : nextProgress;  
        });  
      }, 120);  
  
      return () => clearInterval(interval);  
    }, [onComplete]);  
  
    if (!isVisible) return null;  
  }  
}
```

```

    return (
      <div
        className={`fixed inset-0 z-50 flex flex-col items-
center justify-center bg-gradient-to-br from-blue-50 via-
white to-blue-100 px-4 sm:px-6 transition-all duration-
600 ease-out ${
          !fadeIn ? 'opacity-0 scale-95' : 'opacity-100
scale-100'
        } ${
          fadeOut ? 'opacity-0 scale-105' : ''
        }`}
      >

        <BackgroundPattern fadeOut={fadeOut} />
        <FloatingElements fadeOut={fadeOut} />

        <div className={`relative z-10 flex flex-col items-
center justify-center max-w-xs sm:max-w-lg w-full
transition-all duration-800 ${
          !fadeIn ? 'opacity-0 translate-y-8' : 'opacity-
100 translate-y-0'
        } ${
          fadeOut ? 'opacity-0 -translate-y-8' : ''
        }`}>

          <LogoContainer />
          <TitleSection fadeIn={fadeIn} />
          <LoadingAnimation fadeIn={fadeIn}
progress={progress} />

        </div>

        <Footer fadeOut={fadeOut} fadeIn={fadeIn} />
      </div>
    );
  }
}

```

RecipeDetailPage.jsx

```

// src/pages/RecipeDetailPage.jsx
import { useState } from 'react';
import { useRecipe } from '../hooks/useRecipes';
import { useReviews, useCreateReview } from
 '../hooks/useReviews';
import { useIsFavorited } from '../hooks/useFavorites';
import { getUserIdentifier } from
 '../hooks/useFavorites';
import { formatDate, getDifficultyColor, getStarRating }
from '../utils/helpers';
import { Heart, Clock, Users, ChefHat } from 'lucide-
react';

export default function RecipeDetailPage({ recipeId,
onBack }) {

```

```

    const { recipe, loading: recipeLoading, error:
recipeError } = useRecipe(recipeId);
    const { reviews, loading: reviewsLoading, refetch:
refetchReviews } = useReviews(recipeId);
    const { createReview, loading: createLoading } =
useCreateReview();
    const { isFavorited, loading: favLoading,
toggleFavorite } = useIsFavorited(recipeId);

    const [rating, setRating] = useState(5);
    const [comment, setComment] = useState('');

    const handleSubmitReview = async (e) => {
        e.preventDefault();

        const reviewData = {
            user_idenfifier: getUserIdentifier(),
            rating,
            comment: comment.trim(),
        };

        const result = await createReview(recipeId,
reviewData);
        if (result) {
            setComment('');
            setRating(5);
            refetchReviews();
        }
    };

    const handleToggleFavorite = async () => {
        await toggleFavorite();
    };

    if (recipeLoading) {
        return (
            <div className="min-h-screen flex items-center
justify-center">
                <div className="text-center">
                    <div className="animate-spin rounded-full h-12
w-12 border-b-2 border-indigo-600 mx-auto"></div>
                    <p className="mt-4 text-gray-600">Memuat
resep...</p>
                </div>
            </div>
        );
    }

    if (recipeError) {
        return (
            <div className="min-h-screen flex items-center
justify-center">
                <div className="text-center">
                    <p className="text-red-600 mb-4">Error:
{recipeError}</p>
                    <button

```

```

        onClick={onBack}
        className="px-4 py-2 bg-indigo-600 text-white
rounded-lg hover:bg-indigo-700"
      >
        Kembali
      </button>
    </div>
  </div>
);
}

if (!recipe) {
  return (
    <div className="min-h-screen flex items-center
justify-center">
      <p className="text-gray-600">Resep tidak
ditemukan</p>
    </div>
  );
}

return (
  <div className="min-h-screen bg-linear-to-br from-
blue-50 via-white to-indigo-50 pb-20 md:pb-8">
    { /* Header */ }
    <div className="bg-white shadow-sm sticky top-0 z-
10">
      <div className="max-w-7xl mx-auto px-4 py-4 flex
items-center justify-between">
        <button
          onClick={onBack}
          className="text-indigo-600 hover:text-indigo-
700 font-medium"
        >
          ← Kembali
        </button>
        <button
          onClick={handleToggleFavorite}
          disabled={favLoading}
          className={`p-2 rounded-full transition-
colors ${
            isFavorited
              ? 'bg-red-100 text-red-600'
              : 'bg-gray-100 text-gray-400'
            }`}
        >
          <Heart className={isFavorited ? 'fill-
current' : ''} />
        </button>
      </div>
    </div>

    <div className="max-w-4xl mx-auto px-4 py-8">
      { /* Recipe Image */ }
      <div className="mb-8">
        <img

```

```

        src={recipe.image_url}
        alt={recipe.name}
        className="w-full h-96 object-cover rounded-
2xl shadow-lg"
      />
    </div>

    {/ * Recipe Header */}
    <div className="bg-white rounded-2xl shadow-lg p-
6 md:p-8 mb-6">
      <h1 className="text-3xl md:text-4xl font-bold
text-gray-900 mb-4">
        {recipe.name}
      </h1>

      <div className="flex flex-wrap gap-2 mb-4">
        <span className={`px-3 py-1 rounded-full
text-sm font-medium
${getDifficultyColor(recipe.difficulty)}`}>
          {recipe.difficulty}
        </span>
        <span className="px-3 py-1 rounded-full text-
sm font-medium bg-blue-100 text-blue-800">
          {recipe.category}
        </span>
        {recipe.is_featured && (
          <span className="px-3 py-1 rounded-full
text-sm font-medium bg-yellow-100 text-yellow-800">
            ★ Featured
          </span>
        )}
      </div>

      <p className="text-gray-600 mb-
6">{recipe.description}</p>

      {/ * Recipe Info */}
      <div className="grid grid-cols-2 md:grid-cols-4
gap-4">
        <div className="flex items-center gap-2">
          <Clock className="w-5 h-5 text-indigo-600"
/>
          <div>
            <p className="text-sm text-gray-
500">Persiapan</p>
            <p className="font-
semibold">{recipe.prep_time} menit</p>
          </div>
        </div>
        <div className="flex items-center gap-2">
          <ChefHat className="w-5 h-5 text-indigo-
600" />
          <div>
            <p className="text-sm text-gray-
500">Memasak</p>

```

```

        <p className="font-
semibold">{recipe.cook_time} menit</p>
    </div>
</div>
<div className="flex items-center gap-2">
    <Users className="w-5 h-5 text-indigo-600"
/>

    <div>
        <p className="text-sm text-gray-
500">Porsi</p>
        <p className="font-
semibold">{recipe.servings} orang</p>
    </div>
</div>
<div className="flex items-center gap-2">
    <Heart className="w-5 h-5 text-indigo-600"
/>

    <div>
        <p className="text-sm text-gray-
500">Rating</p>
        <p className="font-
semibold">{recipe.average_rating?.toFixed(1) || 'N/A'}
({recipe.review_count})</p>
    </div>
</div>
</div>
</div>
</div>

    {/* Ingredients */}
    <div className="bg-white rounded-2xl shadow-lg p-
6 md:p-8 mb-6">
        <h2 className="text-2xl font-bold text-gray-900
mb-4">Bahan-bahan</h2>
        <ul className="space-y-2">
            {recipe.ingredients?.map((ingredient, index)
=> (
                <li key={ingredient.id || index}
className="flex items-start">
                    <span className="text-indigo-600 mr-
2">•</span>
                    <span className="text-gray-700">
                        {ingredient.name} -
{ingredient.quantity}
                    </span>
                </li>
            ))}
        </ul>
    </div>

    {/* Steps */}
    <div className="bg-white rounded-2xl shadow-lg p-
6 md:p-8 mb-6">
        <h2 className="text-2xl font-bold text-gray-900
mb-4">Langkah-langkah</h2>
        <ol className="space-y-4">
            {recipe.steps?.map((step) => (

```



```

        <li key={step.id} className="flex gap-4">
            <span className="shrink-0 w-8 h-8 bg-indigo-600 text-white rounded-full flex items-center justify-center font-semibold">
                {step.step_number}
            </span>
            <p className="text-gray-700 flex-1 pt-1">{step.instruction}</p>
        </li>
    </ol>
</div>

    <!-- Reviews Section -->
    <div className="bg-white rounded-2xl shadow-lg p-6 md:p-8 mb-6">
        <h2 className="text-2xl font-bold text-gray-900 mb-6">Ulasan</h2>

        <!-- Create Review Form -->
        <form onSubmit={handleSubmitReview} className="mb-8 p-4 bg-gray-50 rounded-xl">
            <h3 className="font-semibold text-gray-900 mb-3">Tulis Ulasan</h3>

            <!-- Rating Input -->
            <div className="mb-4">
                <label className="block text-sm font-medium text-gray-700 mb-2">
                    Rating
                </label>
                <div className="flex gap-2">
                    {[1, 2, 3, 4, 5].map((star) => (
                        <button
                            key={star}
                            type="button"
                            onClick={() => setRating(star)}
                            className={`text-2xl ${
                                star <= rating ? 'text-yellow-400'
                                : 'text-gray-300'
                            }`}
                        >
                            ★
                        </button>
                    ))}
                </div>
            </div>

            <!-- Comment Input -->
            <div className="mb-4">
                <label className="block text-sm font-medium text-gray-700 mb-2">
                    Komentar (Opsional)
                </label>
                <textarea
                    value={comment}

```

```

        onChange={ (e) =>
setComment (e.target.value) }
        maxLength={500}
        rows={3}
        className="w-full px-4 py-2 border
border-gray-300 rounded-lg focus:ring-2 focus:ring-
indigo-500 focus:border-indigo-500"
        placeholder="Bagikan pengalaman Anda
dengan resep ini..."
      />
      <p className="text-sm text-gray-500 mt-1">
        {comment.length}/500 karakter
      </p>
    </div>

    <button
      type="submit"
      disabled={createLoading}
      className="w-full md:w-auto px-6 py-2 bg-
indigo-600 text-white rounded-lg hover:bg-indigo-700
disabled:opacity-50 disabled:cursor-not-allowed"
    >
      {createLoading ? 'Mengirim...' : 'Kirim
Ulasan'}
    </button>
  </form>

  {/* Reviews List */}
  {reviewsLoading ? (
    <p className="text-gray-500">Memuat
ulasan...</p>
  ) : reviews.length === 0 ? (
    <p className="text-gray-500">Belum ada
ulasan</p>
  ) : (
    <div className="space-y-4">
      {reviews.map((review) => (
        <div key={review.id} className="border-b
border-gray-200 pb-4 last:border-b-0">
          <div className="flex items-center
justify-between mb-2">
            <div>
              <p className="font-medium text-
gray-900">{review.user_idenfier}</p>
              <p className="text-sm text-gray-
500">{formatDate(review.created_at)}</p>
            </div>
            <div className="text-yellow-400">
              {getStarRating(review.rating)}
            </div>
          </div>
          {review.comment && (
            <p className="text-gray-
700">{review.comment}</p>
          )}
        </div>
      )}
    </div>
  )}

```

```

    ))}
  </div>
  )}
</div>
</div>
</div>
);
}

```

7. Lanjut ke *folder* components, edit tiap *file* yang ada dengan kode ini
common/AdvancedFilter.jsx

```

// src/components/common/AdvancedFilter.jsx
import { useState } from 'react';
import { Filter, X, ChevronDown, SlidersHorizontal } from 'lucide-react';

/**
 * AdvancedFilter Component
 * Enhanced filter panel with multiple options (NO
 * category filter - already separate pages)
 */
export default function AdvancedFilter({ onFilterChange,
onSearchChange, initialFilters = {} }) {
  const [isOpen, setIsOpen] = useState(false);
  const [searchQuery, setSearchQuery] =
    useState(initialFilters.search || '');
  const [filters, setFilters] = useState({
    difficulty: initialFilters.difficulty || '',
    sortBy: initialFilters.sortBy || 'created_at',
    order: initialFilters.order || 'desc',
    prepTimeMax: initialFilters.prepTimeMax || '',
  });

  // Debounce search
  const handleSearchChange = (value) => {
    setSearchQuery(value);
    if (onSearchChange) {
      // Simple debounce
      setTimeout(() => {
        onSearchChange(value);
      }, 300);
    }
  };

  const handleFilterChange = (key, value) => {
    const newFilters = { ...filters, [key]: value };
    setFilters(newFilters);

    // Call parent callback
    if (onFilterChange) {
      onFilterChange(newFilters);
    }
  };
}

```

```

const handleReset = () => {
  const resetFilters = {
    difficulty: '',
    sortBy: 'created_at',
    order: 'desc',
    prepTimeMax: '',
  };
  setFilters(resetFilters);
  setSearchQuery('');

  if (onFilterChange) {
    onFilterChange(resetFilters);
  }
  if (onSearchChange) {
    onSearchChange('');
  }
};

const activeFilterCount =
Object.values(filters).filter(v =>
  v && v !== 'created_at' && v !== 'desc'
).length + (searchQuery ? 1 : 0);

return (
  <div className="mb-6 space-y-4">
    { /* Search Bar - Always Visible */ }
    <div>
      <input
        type="text"
        value={searchQuery}
        onChange={ (e) =>
handleSearchChange(e.target.value)}
        placeholder="Cari resep..."
        className="w-full px-4 py-3 border border-
slate-300 rounded-xl focus:ring-2 focus:ring-blue-500
focus:border-blue-500 bg-white shadow-sm"
        />
      </div>

      { /* Filter & Sort Toggle Button */ }
      <button
        onClick={() => setIsOpen(!isOpen)}
        className="flex items-center gap-2 px-4 py-2 bg-
white border border-slate-300 rounded-xl hover:bg-slate-
50 transition-all shadow-sm"
        >
        <SlidersHorizontal className="w-5 h-5 text-slate-
600" />
        <span className="font-medium text-slate-
700">Filter & Sort</span>
        {activeFilterCount > 0 && (
          <span className="px-2 py-0.5 bg-blue-500 text-
white text-xs font-bold rounded-full">
            {activeFilterCount}
          </span>
        )}
      </button>
    </div>
  </div>
);

```

```

        <ChevronDown className={`w-4 h-4 text-slate-500
transition-transform ${isOpen ? 'rotate-180' : ''}`} />
    </button>

    {/* Filter Panel */}
    {isOpen && (
        <div className="bg-white/80 backdrop-blur-sm
border border-slate-200 rounded-2xl p-6 shadow-lg space-
y-4">
            <div className="flex items-center justify-
between mb-4">
                <h3 className="text-lg font-bold text-slate-
800 flex items-center gap-2">
                    <Filter className="w-5 h-5" />
                    Filter & Sorting
                </h3>
                <button
                    onClick={handleReset}
                    className="text-sm text-red-600 hover:text-
red-700 font-medium flex items-center gap-1"
                >
                    <X className="w-4 h-4" />
                    Reset
                </button>
            </div>

            <div className="grid md:grid-cols-2 gap-4">

                {/* Difficulty */}
                <div className="md:col-span-2">
                    <label className="block text-sm font-medium
text-slate-700 mb-2">
                        Tingkat Kesulitan
                    </label>
                    <select
                        value={filters.difficulty}
                        onChange={(e) =>
handleFilterChange('difficulty', e.target.value)}
                        className="w-full px-4 py-2.5 border
border-slate-300 rounded-xl focus:ring-2 focus:ring-blue-
500 focus:border-blue-500 bg-white"
                    >
                        <option value="">Semua Tingkat</option>
                        <option value="mudah">Mudah</option>
                        <option value="sedang">Sedang</option>
                        <option value="sulit">Sulit</option>
                    </select>
                </div>

                {/* Prep Time */}
                <div>
                    <label className="block text-sm font-medium
text-slate-700 mb-2">
                        Waktu Persiapan (maks)
                    </label>
                    <select

```

```

        value={filters.prepTimeMax}
        onChange={ (e) =>
handleFilterChange('prepTimeMax', e.target.value)}
        className="w-full px-4 py-2.5 border
border-slate-300 rounded-xl focus:ring-2 focus:ring-blue-
500 focus:border-blue-500 bg-white"
      >
        <option value="">Semua Durasi</option>
        <option value="15">≤ 15 menit</option>
        <option value="30">≤ 30 menit</option>
        <option value="60">≤ 60 menit</option>
        <option value="120">≤ 2 jam</option>
      </select>
    </div>

    { /* Sort By */ }
    <div>
      <label className="block text-sm font-medium
text-slate-700 mb-2">
        Urutkan Berdasarkan
      </label>
      <select
        value={filters.sortBy}
        onChange={ (e) =>
handleFilterChange('sortBy', e.target.value)}
        className="w-full px-4 py-2.5 border
border-slate-300 rounded-xl focus:ring-2 focus:ring-blue-
500 focus:border-blue-500 bg-white"
      >
        <option
value="created_at">Terbaru</option>
        <option value="name">Nama (A-Z)</option>
        <option value="prep_time">Waktu
Persiapan</option>
        <option value="cook_time">Waktu
Masak</option>
        <option
value="difficulty">Kesulitan</option>
      </select>
    </div>

    { /* Order */ }
    <div>
      <label className="block text-sm font-medium
text-slate-700 mb-2">
        Urutan
      </label>
      <select
        value={filters.order}
        onChange={ (e) =>
handleFilterChange('order', e.target.value)}
        className="w-full px-4 py-2.5 border
border-slate-300 rounded-xl focus:ring-2 focus:ring-blue-
500 focus:border-blue-500 bg-white"
      >

```

```

        <option value="desc">Descending (Besar →
Kecil)</option>
        <option value="asc">Ascending (Kecil →
Besar)</option>
    </select>
</div>
</div>

    { /* Active Filters Display */ }
    { activeFilterCount > 0 && (
        <div className="pt-4 border-t border-slate-
200">
            <p className="text-sm text-slate-600 mb-
2">Filter Aktif:</p>
            <div className="flex flex-wrap gap-2">
                {searchQuery && (
                    <span className="inline-flex items-
center gap-1 px-3 py-1 bg-blue-100 text-blue-700 rounded-
full text-sm">
                        Search: "{searchQuery}"
                        <button onClick={() =>
handleSearchChange('')}>
                            <X className="w-3 h-3" />
                        </button>
                    </span>
                )}
                {filters.difficulty && (
                    <span className="inline-flex items-
center gap-1 px-3 py-1 bg-purple-100 text-purple-700
rounded-full text-sm">
                        {filters.difficulty}
                        <button onClick={() =>
handleFilterChange('difficulty', '')}>
                            <X className="w-3 h-3" />
                        </button>
                    </span>
                )}
                {filters.prepTimeMax && (
                    <span className="inline-flex items-
center gap-1 px-3 py-1 bg-orange-100 text-orange-700
rounded-full text-sm">
                        ≤ {filters.prepTimeMax} min
                        <button onClick={() =>
handleFilterChange('prepTimeMax', '')}>
                            <X className="w-3 h-3" />
                        </button>
                    </span>
                )}
            </div>
        </div>
    )}
</div>
);
}

```

common/FavoriteButton.jsx

```
// src/components/common/FavoriteButton.jsx
import { useState, useEffect } from 'react';
import { Heart } from 'lucide-react';

/**
 * FavoriteButton Component
 * Toggles favorite status with localStorage support
 */
export default function FavoriteButton({ recipeId,
onToggle, showCount = false, initialCount = 0, size =
'md' }) {
  const [isFavorited, setIsFavorited] = useState(false);
  const [favoriteCount, setFavoriteCount] =
useState(initialCount);
  const [isAnimating, setIsAnimating] = useState(false);

  // Size variants
  const sizes = {
    sm: 'w-8 h-8',
    md: 'w-10 h-10',
    lg: 'w-12 h-12'
  };

  const iconSizes = {
    sm: 'w-4 h-4',
    md: 'w-5 h-5',
    lg: 'w-6 h-6'
  };

  // Check if recipe is favorited on mount
  useEffect(() => {
    const favorites =
JSON.parse(localStorage.getItem('favorites') || '[]');
    setIsFavorited(favorites.includes(recipeId));
  }, [recipeId]);

  const handleToggle = async (e) => {
    e.stopPropagation(); // Prevent card click

    setIsAnimating(true);
    setTimeout(() => setIsAnimating(false), 300);

    // Toggle in localStorage
    const favorites =
JSON.parse(localStorage.getItem('favorites') || '[]');
    const index = favorites.indexOf(recipeId);

    let newFavoritedState;
    if (index > -1) {
      // Remove from favorites
      favorites.splice(index, 1);
      newFavoritedState = false;
      setFavoriteCount(prev => Math.max(0, prev - 1));
    }
  }
}
```



```

    } else {
      // Add to favorites
      favorites.push(recipeId);
      newFavoritedState = true;
      setFavoriteCount(prev => prev + 1);
    }

    localStorage.setItem('favorites',
JSON.stringify(favorites));
    setIsFavorited(newFavoritedState);

    // Call parent callback if provided
    if (onToggle) {
      onToggle(recipeId, newFavoritedState);
    }
  };

  return (
    <button
      onClick={handleToggle}
      className={`
        ${sizes[size]} rounded-full flex items-center
justify-center gap-1.5
transition-all duration-200
        ${isFavorited
          ? 'bg-red-500 hover:bg-red-600 text-white'
          : 'bg-white/90 hover:bg-white text-slate-700
hover:text-red-500'}
        }
      backdrop-blur-sm shadow-md hover:shadow-lg
      ${isAnimating ? 'scale-125' : 'scale-100'}
      group
    `}
    title={isFavorited ? 'Remove from favorites' : 'Add
to favorites'}
    >
      <Heart
        className={`
          ${iconSizes[size]}
          transition-all duration-200
          ${isFavorited ? 'fill-current' : ''}
          ${isAnimating ? 'animate-pulse' : ''}
        `}
      />
      {showCount && favoriteCount > 0 && (
        <span className="text-xs font-semibold">
          {favoriteCount > 999 ? '999+' : favoriteCount}
        </span>
      )}
    </button>
  );
}

```

home/FeaturedMakananSection.jsx

```

// src/components/home/FeaturedMakananSection.jsx
import { Clock, Star, ChefHat } from 'lucide-react';
import { useState, useEffect, useRef } from 'react';

export default function FeaturedMakananSection({ recipes,
loading, error, onRecipeClick, onNavigate }) {
  const [visibleMakanan, setVisibleMakanan] =
useState(new Set());
  const makananRefs = useRef([]);

  useEffect(() => {
    const observerMakanan = new
IntersectionObserver((entries) => {
      entries.forEach((entry) => {
        if (entry.isIntersecting) {
          const index =
parseInt(entry.target.dataset.index);
          setTimeout(() => {
            setVisibleMakanan(prev => new
Set(prev).add(index));
          }, index * 200);
        }
      });
    }, { threshold: 0.1 });

    makananRefs.current.forEach((ref, index) => {
      if (ref) {
        ref.dataset.index = index;
        observerMakanan.observe(ref);
      }
    });

    return () => {
      observerMakanan.disconnect();
    };
  }, [recipes]);

  if (loading) {
    return (
      <section>
        <h2 className="text-xl md:text-3xl font-bold
text-slate-800 mb-6">Resep Makanan</h2>
        <div className="text-center py-12">
          <div className="animate-spin rounded-full h-12
w-12 border-b-2 border-indigo-600 mx-auto"></div>
          <p className="mt-4 text-gray-600">Memuat resep
makanan...</p>
        </div>
      </section>
    );
  }

  if (error) {
    return (
      <section>

```

```

        <h2 className="text-xl md:text-3xl font-bold
text-slate-800 mb-6">Resep Makanan</h2>
        <div className="text-center py-12">
            <p className="text-red-600">Error: {error}</p>
        </div>
    </section>
    );
}

if (!recipes || recipes.length === 0) {
    return (
        <section>
            <h2 className="text-xl md:text-3xl font-bold
text-slate-800 mb-6">Resep Makanan</h2>
            <div className="text-center py-12">
                <p className="text-gray-600">Belum ada resep
makanan</p>
            </div>
        </section>
    );
}

return (
    <section>
        <div className="flex items-center justify-between
mb-6 md:mb-8">
            <h2 className="text-xl md:text-3xl font-bold
text-slate-800">Resep Makanan</h2>
            <button
                onClick={() => onNavigate &&
onNavigate('makanan')}
                className="text-slate-500 hover:text-slate-600
font-medium text-xs md:text-sm transition-colors
duration-200 hover:underline"
            >
                Lihat Semua
            </button>
        </div>

        <div className="grid grid-cols-1 md:grid-cols-3
gap-4 md:gap-8">
            {recipes.map((recipe, index) => (
                <div
                    key={recipe.id}
                    ref={el => makananRefs.current[index] = el}
                    className={`group transform transition-all
duration-700 ${
                        visibleMakanan.has(index)
                            ? 'translate-y-0 opacity-100'
                            : 'translate-y-8 opacity-0'
                    }`}
                >
                    <div
                        onClick={() => onRecipeClick &&
onRecipeClick(recipe.id)}

```

```

        className="relative bg-white/15 backdrop-
blur-xl border border-white/25 rounded-2xl md:rounded-3xl
overflow-hidden shadow-lg md:shadow-2xl shadow-blue-500/5
hover:shadow-blue-500/15 transition-all duration-500
cursor-pointer group-hover:scale-105 group-hover:bg-
white/20">

        <div className="absolute inset-0 bg-linear-
to-br from-white/5 via-transparent to-blue-500/5 opacity-
0 group-hover:opacity-100 transition-opacity duration-
500" />

        {/* Recipe Image*/}
        <div className="relative h-32 md:h-56
overflow-hidden">
            <img
                src={recipe.image_url}
                alt={recipe.name}
                className="w-full h-full object-cover
group-hover:scale-110 transition-transform duration-500"
            />
            <div className="absolute inset-0 bg-
gradient-to-t from-black/20 via-transparent to-
transparent" />
        </div>

        <div className="relative z-10 p-4 md:p-8">
            <div className="flex items-center
justify-between mb-3 md:mb-4">
                <span className="text-xs font-semibold
text-blue-700 bg-blue-100/90 px-2 md:px-3 py-1 md:py-1.5
rounded-full">
                    Makanan
                </span>
                {recipe.average_rating > 0 && (
                    <div className="flex items-center
space-x-1 bg-white/90 px-2 py-1 rounded-full">
                        <Star className="w-3 h-3 md:w-4
md:h-4 text-yellow-500 fill-current" />
                        <span className="text-xs md:text-sm
font-semibold text-slate-700">
{recipe.average_rating.toFixed(1)}
                        </span>
                    </div>
                )}
            </div>

            <h3 className="font-bold text-slate-800
mb-3 md:mb-4 text-base md:text-xl group-hover:text-blue-
600 transition-colors duration-200 line-clamp-2">
                {recipe.name}
            </h3>

            <div className="flex items-center
justify-between text-xs md:text-sm text-slate-600">

```

```

        <div className="flex items-center
space-x-1 md:space-x-2 bg-white/70 px-2 md:px-3 py-1
md:py-2 rounded-full">
            <Clock className="w-3 h-3 md:w-4
md:h-4" />
            <span className="font-
medium">{recipe.prep_time || 15} menit</span>
        </div>
        <div className="flex items-center
space-x-1 md:space-x-2 bg-white/70 px-2 md:px-3 py-1
md:py-2 rounded-full">
            <ChefHat className="w-3 h-3 md:w-4
md:h-4" />
            <span className="font-
medium">{recipe.difficulty || 'mudah'}</span>
        </div>
    </div>
</div>
</div>
</div>
</div>
</div>
    )}
</div>
</section>
);
}

```

home/FeaturedMinumanSection.jsx

```

// src/components/home/FeaturedMinumanSection.jsx
import { Clock, Star, ChefHat, Coffee } from 'lucide-react';
import { useState, useEffect, useRef } from 'react';

export default function FeaturedMinumanSection({ recipes,
loading, error, onRecipeClick, onNavigate }) {
    const [visibleMinuman, setVisibleMinuman] = useState(new
Set());
    const minumanRefs = useRef([]);

    useEffect(() => {
        const observerMinuman = new
IntersectionObserver((entries) => {
            entries.forEach((entry) => {
                if (entry.isIntersecting) {
                    const index =
parseInt(entry.target.dataset.index);
                    setTimeout(() => {
                        setVisibleMinuman(prev => new
Set(prev).add(index));
                    }, index * 250);
                }
            });
        }, { threshold: 0.1 });

        minumanRefs.current.forEach((ref, index) => {

```

```

        if (ref) {
            ref.dataset.index = index;
            observerMinuman.observe(ref);
        }
    });

    return () => {
        observerMinuman.disconnect();
    };
}, [recipes]);

if (loading) {
    return (
        <section>
            <h2 className="text-xl md:text-3xl font-bold text-slate-800 mb-6">Resep Minuman</h2>
            <div className="text-center py-12">
                <div className="animate-spin rounded-full h-12 w-12 border-b-2 border-indigo-600 mx-auto"></div>
                <p className="mt-4 text-gray-600">Memuat resep minuman...</p>
            </div>
        </section>
    );
}

if (error) {
    return (
        <section>
            <h2 className="text-xl md:text-3xl font-bold text-slate-800 mb-6">Resep Minuman</h2>
            <div className="text-center py-12">
                <p className="text-red-600">Error: {error}</p>
            </div>
        </section>
    );
}

if (!recipes || recipes.length === 0) {
    return (
        <section>
            <h2 className="text-xl md:text-3xl font-bold text-slate-800 mb-6">Resep Minuman</h2>
            <div className="text-center py-12">
                <p className="text-gray-600">Belum ada resep minuman</p>
            </div>
        </section>
    );
}

return (
    <section>
        <div className="flex items-center justify-between mb-6 md:mb-8">

```

```

        <h2 className="text-xl md:text-3xl font-bold text-slate-800">Resep Minuman</h2>
        <button
            onClick={() => onNavigate &&
onNavigate('minuman')}
            className="text-slate-500 hover:text-slate-600
font-medium text-xs md:text-sm transition-colors duration-
200 hover:underline"
        >
            Lihat Semua
        </button>
    </div>

    <div className="grid grid-cols-1 md:grid-cols-2 gap-
4 md:gap-8">
        {recipes.map((recipe, index) => (
            <div
                key={recipe.id}
                ref={el => minumanRefs.current[index] = el}
                className={`group transform transition-all
duration-700 ${
                    visibleMinuman.has(index)
                        ? 'translate-y-0 opacity-100'
                        : 'translate-y-8 opacity-0'
                }`}
            >
                <div
                    onClick={() => onRecipeClick &&
onRecipeClick(recipe.id)}
                    className="relative bg-white/15 backdrop-
blur-xl border border-white/25 rounded-2xl md:rounded-3xl
overflow-hidden shadow-lg md:shadow-2xl shadow-indigo-
500/5 hover:shadow-indigo-500/15 transition-all duration-
500 cursor-pointer group-hover:scale-105 group-hover:bg-
white/20">

                        <div className="absolute inset-0 bg-linear-
to-br from-white/5 via-transparent to-indigo-500/5
opacity-0 group-hover:opacity-100 transition-opacity
duration-500" />

                        <div className="flex">
                            {/* Recipe Image */}
                            <div className="h-29 w-28 md:h-48 md:w-48
flex-shrink-0 overflow-hidden">
                                <img
                                    src={recipe.image_url}
                                    alt={recipe.name}
                                    className="w-full h-full object-cover
group-hover:scale-110 transition-transform duration-500"
                                />
                            </div>

                            <div className="relative z-10 p-4 md:p-8
flex-1 flex flex-col justify-center">

```

```

        <div className="flex items-center justify-between mb-2 md:mb-4">
            <span className="text-xs font-semibold text-indigo-700 bg-indigo-100/90 px-2 md:px-3 py-1 md:py-1.5 rounded-full">
                Minuman
            </span>
            {recipe.average_rating > 0 && (
                <div className="flex items-center space-x-1 bg-white/90 px-2 py-1 rounded-full">
                    <Star className="w-3 h-3 md:w-4 md:h-4 text-yellow-500 fill-current" />
                    <span className="text-xs md:text-sm font-semibold text-slate-700">
                        {recipe.average_rating.toFixed(1)}
                    </span>
                </div>
            )}
        </div>

        <h3 className="font-bold text-slate-800 mb-2 md:mb-4 text-sm md:text-xl group-hover:text-indigo-600 transition-colors duration-200 line-clamp-2">
            {recipe.name}
        </h3>

        <div className="flex items-center justify-between text-xs md:text-sm text-slate-600">
            <div className="flex items-center space-x-1 md:space-x-2 bg-white/70 px-2 md:px-3 py-1 md:py-2 rounded-full">
                <Clock className="w-3 h-3 md:w-4 md:h-4" />
                <span className="font-medium">{recipe.prep_time || 10} menit</span>
            </div>
            <div className="flex items-center space-x-1 md:space-x-2 bg-white/70 px-2 md:px-3 py-1 md:py-2 rounded-full">
                <Coffee className="w-3 h-3 md:w-4 md:h-4" />
                <span className="font-medium">{recipe.difficulty || 'mudah'}</span>
            </div>
        </div>
    </div>
</div>
</div>
</div>
</div>
</div>
</section>
);
}

```


makanan/RecipeGrid.jsx

```
// src/components/makanan/RecipeGrid.jsx
import { Clock, Star, ChefHat } from 'lucide-react';
import { useState, useEffect, useRef } from 'react';
import FavoriteButton from '../common/FavoriteButton';

export default function RecipeGrid({ recipes,
onRecipeClick }) {
  const [visibleCards, setVisibleCards] = useState(new
Set());
  const cardRefs = useRef([]);

  useEffect(() => {

    cardRefs.current = cardRefs.current.slice(0,
recipes.length);

    const observer = new IntersectionObserver((entries)
=> {
      entries.forEach((entry) => {
        if (entry.isIntersecting) {
          const index =
parseInt(entry.target.dataset.index);

          setTimeout(() => {
            setVisibleCards(prev => new
Set(prev).add(index));
          }, (index % 3) * 150);
        }
      });
    }, { threshold: 0.1 });

    cardRefs.current.forEach((ref, index) => {
      if (ref) {
        ref.dataset.index = index;
        observer.observe(ref);
      }
    });

    return () => {
      observer.disconnect();
    };
  }, [recipes]);

  return (
    <section>
      <h1 className="text-3xl md:text-5xl font-bold
text-slate-800 text-center mb-4">
        Jelajahi Resep Makanan
      </h1>
      <p className="text-center text-slate-500 max-w-2xl
mx-auto mb-8">
        Temukan inspirasi masakan Nusantara favoritmu.
        Dari hidangan utama hingga camilan, semua ada di sini.
      </p>
    </section>
  );
}
```

```

<div className="grid grid-cols-1 md:grid-cols-2
lg:grid-cols-3 gap-4 md:gap-8">
  {recipes.map((recipe, index) => (
    <div
      key={recipe.id}
      ref={el => cardRefs.current[index] = el}
      className={`group transform transition-all
duration-700 ${
        visibleCards.has(index)
          ? 'translate-y-0 opacity-100'
          : 'translate-y-8 opacity-0'
        }`}
    >

      <div
        onClick={() => onRecipeClick &&
onRecipeClick(recipe.id)}
        className="relative bg-white/15 backdrop-
blur-xl border border-white/25 rounded-2xl md:rounded-3xl
overflow-hidden shadow-lg md:shadow-2xl shadow-blue-500/5
hover:shadow-blue-500/15 transition-all duration-500
cursor-pointer group-hover:scale-105 group-hover:bg-
white/20">

          <div className="absolute inset-0 bg-
gradient-to-br from-white/5 via-transparent to-blue-500/5
opacity-0 group-hover:opacity-100 transition-opacity
duration-500" />

          <div className="relative h-32 md:h-56
overflow-hidden">

            <img
              src={recipe.image_url}
              alt={recipe.name}
              className="w-full h-full object-cover
group-hover:scale-110 transition-transform duration-500"
            />

            <div className="absolute inset-0 bg-
gradient-to-t from-black/20 via-transparent to-
transparent" />

            {/* Favorite Button */}
            <div className="absolute top-3 right-3 z-
10">

              <FavoriteButton recipeId={recipe.id}
size="sm" />

            </div>

          </div>

          <div className="relative z-10 p-4 md:p-8">

            <div className="flex items-center
justify-between mb-3 md:mb-4">

              <span className="text-xs font-semibold
text-blue-700 bg-blue-100/90 px-2 md:px-3 py-1 md:py-1.5
rounded-full">

                Makanan

              </span>

              {recipe.average_rating > 0 && (

```



```

import FavoriteButton from '../common/FavoriteButton';

export default function RecipeGrid({ recipes,
onRecipeClick }) {
  const [visibleCards, setVisibleCards] = useState(new
Set());
  const cardRefs = useRef([]);

  useEffect(() => {
    cardRefs.current = cardRefs.current.slice(0,
recipes.length);

    const observer = new IntersectionObserver((entries)
=> {
      entries.forEach((entry) => {
        if (entry.isIntersecting) {
          const index =
parseInt(entry.target.dataset.index);
          setTimeout(() => {
            setVisibleCards(prev => new
Set(prev).add(index));
          }, (index % 3) * 150);
        }
      });
    }, { threshold: 0.1 });

    cardRefs.current.forEach((ref, index) => {
      if (ref) {
        ref.dataset.index = index;
        observer.observe(ref);
      }
    });

    return () => {
      observer.disconnect();
    };
  }, [recipes]);

  return (
    <section>
      <h1 className="text-3xl md:text-5xl font-bold text-
slate-800 text-center mb-4">
        Jelajahi Resep Minuman
      </h1>
      <p className="text-center text-slate-500 max-w-2xl
mx-auto mb-8">
        Temukan minuman segar, hangat, dan kekinian.
        Mulai dari kopi hingga jus buah, semua ada di sini.
      </p>
      <div className="grid grid-cols-1 md:grid-cols-2
lg:grid-cols-3 gap-4 md:gap-8">
        {recipes.map((recipe, index) => (
          <div
            key={recipe.id}
            ref={el => cardRefs.current[index] = el}

```

```

        className={`group transform transition-all
duration-700 ${
            visibleCards.has(index)
                ? 'translate-y-0 opacity-100'
                : 'translate-y-8 opacity-0'
            }`}
    >
        {/* Card structure is consistent, only the
tag is changed */}
        <div
            onClick={() => onRecipeClick} &&
onRecipeClick(recipe.id)}
            className="relative bg-white/15 backdrop-
blur-xl border border-white/25 rounded-2xl md:rounded-3xl
overflow-hidden shadow-lg md:shadow-2xl shadow-green-
500/5 hover:shadow-green-500/15 transition-all duration-
500 cursor-pointer group-hover:scale-105 group-hover:bg-
white/20">
                <div className="absolute inset-0 bg-
gradient-to-br from-white/5 via-transparent to-green-
500/5 opacity-0 group-hover:opacity-100 transition-
opacity duration-500" />
                    <div className="relative h-32 md:h-56
overflow-hidden">
                        <img
                            src={recipe.image_url}
                            alt={recipe.name}
                            className="w-full h-full object-cover
group-hover:scale-110 transition-transform duration-500"
                            />
                            <div className="absolute inset-0 bg-
gradient-to-t from-black/20 via-transparent to-
transparent" />
                                {/* Favorite Button */}
                                <div className="absolute top-3 right-3 z-
10">
                                    <FavoriteButton recipeId={recipe.id}
size="sm" />
                                </div>
                            </div>
                            <div className="relative z-10 p-4 md:p-8">
                                <div className="flex items-center
justify-between mb-3 md:mb-4">
                                    {/* Changed tag color from blue to
green */}
                                    <span className="text-xs font-semibold
text-green-700 bg-green-100/90 px-2 md:px-3 py-1 md:py-
1.5 rounded-full">
                                        Minuman
                                    </span>
                                    {recipe.average_rating > 0 && (
                                        <div className="flex items-center
space-x-1 bg-white/90 px-2 py-1 rounded-full">
                                            <Star className="w-3 h-3 md:w-4
md:h-4 text-yellow-500 fill-current" />

```

```

        <span className="text-xs md:text-sm
font-semibold text-slate-
700">{recipe.average_rating.toFixed(1)}</span>
      </div>
    )}
  </div>
  <h3 className="font-bold text-slate-800
mb-3 md:mb-4 text-base md:text-xl group-hover:text-green-
600 transition-colors duration-200 line-clamp-2">
    {recipe.name}
  </h3>
  <div className="flex items-center
justify-between text-xs md:text-sm text-slate-600">
    <div className="flex items-center
space-x-1 md:space-x-2 bg-white/70 px-2 md:px-3 py-1
md:py-2 rounded-full">
      <Clock className="w-3 h-3 md:w-4
md:h-4" />
      <span className="font-
medium">{recipe.prep_time}</span>
    </div>
    <div className="flex items-center
space-x-1 md:space-x-2 bg-white/70 px-2 md:px-3 py-1
md:py-2 rounded-full">
      <ChefHat className="w-3 h-3 md:w-4
md:h-4" />
      <span className="font-
medium">{recipe.difficulty}</span>
    </div>
  </div>
</div>
</div>
</div>
</div>
</div>
    )}
  </div>
  {recipes.length === 0 && (
    <div className="text-center py-16">
      <p className="text-slate-500">Minuman tidak
ditemukan. Coba kata kunci lain.</p>
    </div>
  )}
</section>
);
}

```

modals/ConfirmModal.jsx

```

// src/components/modals/ConfirmModal.jsx
import { AlertTriangle, X } from 'lucide-react';

export default function ConfirmModal({
  isOpen,
  onClose,
  onConfirm,
  title = 'Konfirmasi',
}) {

```

```

message = 'Apakah Anda yakin?',
confirmText = 'Ya, Lanjutkan',
cancelText = 'Batal',
variant = 'danger', // 'danger' | 'warning' | 'info'
isLoading = false,
})) {
  if (!isOpen) return null;

  const variantStyles = {
    danger: {
      icon: 'bg-red-100 text-red-600',
      button: 'bg-red-600 hover:bg-red-700',
    },
    warning: {
      icon: 'bg-yellow-100 text-yellow-600',
      button: 'bg-yellow-600 hover:bg-yellow-700',
    },
    info: {
      icon: 'bg-blue-100 text-blue-600',
      button: 'bg-blue-600 hover:bg-blue-700',
    },
  };

  const currentVariant = variantStyles[variant] ||
variantStyles.danger;

  return (
    <div className="fixed inset-0 z-50 flex items-center
justify-center p-4 bg-black/50 backdrop-blur-sm animate-
fadeIn">
      <div className="bg-white rounded-2xl shadow-2xl
max-w-md w-full animate-slideUp">
        {/* Header */}
        <div className="flex items-center justify-between
p-6 border-b border-slate-200">
          <div className="flex items-center gap-3">
            <div className={`w-10 h-10 rounded-full flex
items-center justify-center ${currentVariant.icon}`>
              <AlertTriangle className="w-5 h-5" />
            </div>
            <h3 className="text-xl font-bold text-slate-
800">{title}</h3>
          </div>
          <button
            onClick={onClose}
            disabled={isLoading}
            className="text-slate-400 hover:text-slate-
600 transition-colors disabled:opacity-50"
          >
            <X className="w-6 h-6" />
          </button>
        </div>

        {/* Content */}
        <div className="p-6">

```

```

        <p className="text-slate-600 leading-
relaxed">{message}</p>
      </div>

      { /* Actions */ }
      <div className="flex gap-3 p-6 bg-slate-50
rounded-b-2xl">
        <button
          onClick={onClose}
          disabled={isLoading}
          className="flex-1 px-4 py-3 border border-
slate-300 text-slate-700 rounded-xl hover:bg-white
transition-colors font-medium disabled:opacity-50
disabled:cursor-not-allowed"
        >
          {cancelText}
        </button>
        <button
          onClick={onConfirm}
          disabled={isLoading}
          className={`flex-1 px-4 py-3 text-white
rounded-xl transition-colors font-medium
disabled:opacity-50 disabled:cursor-not-allowed
${currentVariant.button}`}
        >
          {isLoading ? 'Memproses...' : confirmText}
        </button>
      </div>
    </div>
  </div>
);
}

```

navbar/DesktopNavbar.jsx

```

// src/components/DesktopNavbar.jsx
import { Plus } from 'lucide-react';
import logoUrl from '../../assets/LOGORN.png';

export default function DesktopNavbar({ currentPage,
onNavigate, onCreateRecipe }) {
  const navItems = [
    { id: 'home', label: 'Beranda' },
    { id: 'makanan', label: 'Makanan' },
    { id: 'minuman', label: 'Minuman' },
    { id: 'profile', label: 'Profile' }
  ];

  return (
    <nav className="hidden md:block shadow-lg border-b
border-blue-100 sticky top-0 z-50 backdrop-blur-sm bg-
white/95">
      <div className="max-w-7xl mx-auto px-4 sm:px-6
lg:px-8">

```



```

<div className="flex justify-between items-center
h-20">

    {/* Logo */}
    <div className="flex items-center space-x-4">
        <div className="relative group">
            <img
                src={logoUrl}
                alt="Resep Nusantara Logo"
                className="w-12 h-12 object-contain
filter drop-shadow-md transition-transform
duration-300 group-hover:scale-110"
            />
            {/* Decorative particles */}
            <div className="absolute -top-0.5 -right-
0.5 w-1.5 h-1.5 bg-blue-400 rounded-full animate-ping
opacity-60" />
            <div className="absolute -bottom-0.5 -left-
0.5 w-1 h-1 bg-blue-300 rounded-full animate-ping
opacity-50" style={{ animationDelay: '300ms' }} />
            </div>
            <div>
                <h1 className="text-2xl font-bold bg-
gradient-to-r from-slate-800 via-slate-700 to-slate-800
bg-clip-text text-transparent">
                    Resep
                </h1>
                <h2 className="text-base font-semibold bg-
gradient-to-r from-blue-600 via-blue-500 to-blue-400 bg-
clip-text text-transparent -mt-1">
                    Nusantara
                </h2>
            </div>
        </div>

    {/* Navigation Links */}
    <div className="flex items-center space-x-10">
        {navItems.map((item) => (
            <button
                key={item.id}
                onClick={() => onNavigate(item.id)}
                className={`px-4 py-3 text-base font-
medium transition-all duration-200 border-b-2 ${
                    currentPage === item.id
                        ? 'text-blue-600 border-blue-500'
                        : 'text-slate-600 border-transparent
hover:text-blue-500 hover:border-blue-300'
                }}
            >
                {item.label}
            </button>
        ))}

        {/* Buat Resep Button */}
        <button
            onClick={onCreateRecipe}

```

```

        className="flex items-center gap-2 px-5 py-
2.5 bg-gradient-to-r from-blue-600 to-indigo-600 text-
white rounded-xl hover:from-blue-700 hover:to-indigo-700
transition-all duration-200 shadow-md hover:shadow-lg
transform hover:scale-105 font-medium"
        >
            <Plus className="w-5 h-5" />
            <span>Buat Resep</span>
        </button>
    </div>

</div>
</div>
</nav>
);
}

```

navbar/MobileNavbar.jsx

```

// src/components/MobileNavbar.jsx
import { Home, ChefHat, Coffee, User, Plus } from
' lucide-react';

export default function MobileNavbar({ currentPage,
onNavigate, onCreateRecipe }) {
    const navItems = [
        { id: 'home', label: 'Beranda', icon: Home },
        { id: 'makanan', label: 'Makanan', icon: ChefHat },
        { id: 'minuman', label: 'Minuman', icon: Coffee },
        { id: 'profile', label: 'Profile', icon: User }
    ];

    return (
        <>
            { /* Floating Create Button */ }
            { onCreateRecipe && (
                <button
                    onClick={onCreateRecipe}
                    className="md:hidden fixed bottom-20 right-4 z-
50 w-14 h-14 bg-blue-600 text-white rounded-full shadow-
lg hover:bg-blue-700 transition-all hover:scale-110 flex
items-center justify-center"
                >
                    <Plus className="w-6 h-6" />
                </button>
            ) }

            { /* Bottom Navigation */ }
            <nav className="md:hidden fixed bottom-0 left-0
right-0 bg-white border-t border-gray-100 px-4 py-1 z-
50">
                <div className="flex items-center justify-around
max-w-sm mx-auto">
                    { navItems.map((item) => {

```

```

        const IconComponent = item.icon;
        const isActive = currentPage === item.id;

        return (
            <button
                key={item.id}
                onClick={() => onNavigate(item.id)}
                className={`flex flex-col items-center py-2
px-3 transition-colors duration-200 ${
                    isActive ? 'text-blue-600' : 'text-gray-
400'
                }}`
            >
                <IconComponent
                    size={20}
                    className="mb-1"
                    strokeWidth={isActive ? 2 : 1.5}
                />
                <span className="text-xs font-medium">
                    {item.label}
                </span>
            </button>
        );
    }
}
</div>
</nav>
</>
);
}

```

recipe/RecipeDetail.jsx

```

// src/components/recipe/RecipeDetail.jsx
import { useState } from 'react';
import { useRecipe } from '../../hooks/useRecipes';
import { useReviews, useCreateReview } from
'../../hooks/useReviews';
import { useIsFavorited } from
'../../hooks/useFavorites';
import { getUserIdentifier } from
'../../hooks/useFavorites';
import { formatDate, getDifficultyColor, getStarRating }
from '../../utils/helpers';
import { ArrowLeft, Heart, Clock, Users, ChefHat, Star,
Send, Edit, Trash2 } from 'lucide-react';
import recipeService from '../../services/recipeService';
import ConfirmModal from '../../modals/ConfirmModal';
import FavoriteButton from '../../common/FavoriteButton';
import userService from '../../services/userService';

export default function RecipeDetail({ recipeId, onBack,
onEdit, category = 'makanan' }) {
    const { recipe, loading: recipeLoading, error:
recipeError } = useRecipe(recipeId);

```

```

    const { reviews, loading: reviewsLoading, refetch:
    refetchReviews } = useReviews(recipeId);
    const { createReview, loading: createLoading } =
    useCreateReview();
    const { isFavorited, loading: favLoading,
    toggleFavorite } = useIsFavorited(recipeId);

    const [rating, setRating] = useState(5);
    const [comment, setComment] = useState('');
    const [showReviewForm, setShowReviewForm] =
    useState(false);
    const [showDeleteModal, setShowDeleteModal] =
    useState(false);
    const [deleting, setDeleting] = useState(false);

    const categoryColors = {
      makanan: {
        primary: 'blue',
        gradient: 'from-blue-50 via-white to-indigo-50',
        text: 'text-blue-700',
        bg: 'bg-blue-100',
        border: 'border-blue-400',
        hover: 'hover:bg-blue-50',
        ring: 'ring-blue-500'
      },
      minuman: {
        primary: 'green',
        gradient: 'from-green-50 via-white to-cyan-50',
        text: 'text-green-700',
        bg: 'bg-green-100',
        border: 'border-green-400',
        hover: 'hover:bg-green-50',
        ring: 'ring-green-500'
      }
    };

    const colors = categoryColors[category] ||
    categoryColors.makanan;

    const handleSubmitReview = async (e) => {
      e.preventDefault();

      // Get username from user profile
      const userProfile = userService.getUserProfile();

      const reviewData = {
        user_identifier: userProfile.username ||
        getUserIdentifier(),
        rating,
        comment: comment.trim(),
      };

      const success = await createReview(recipeId,
      reviewData);

      if (success) {

```

```

        setComment('');
        setRating(5);
        setShowReviewForm(false);
        refetchReviews();
    }
};

const handleToggleFavorite = async () => {
    await toggleFavorite();
};

const handleDeleteRecipe = async () => {
    try {
        setDeleting(true);
        const result = await
recipeService.deleteRecipe(recipeId);

        if (result.success) {
            alert('Resep berhasil dihapus!');
            setShowDeleteModal(false);
            if (onBack) {
                onBack();
            }
        } else {
            throw new Error(result.message || 'Gagal
menghapus resep');
        }
    } catch (err) {
        console.error('Delete recipe error:', err);
        alert(err.message || 'Terjadi kesalahan saat
menghapus resep');
    } finally {
        setDeleting(false);
    }
};

if (recipeLoading) {
    return (
        <div className="min-h-screen flex items-center
justify-center">
            <div className="text-center">
                <div className={`animate-spin rounded-full h-12
w-12 border-b-2 border-${colors.primary}-600 mx-
auto`} ></div>
                <p className="mt-4 text-slate-600">Memuat
resep...</p>
            </div>
        </div>
    );
}

if (recipeError) {
    return (
        <div className="min-h-screen flex items-center
justify-center p-4">
            <div className="text-center max-w-md">

```

```

        <div className="bg-red-50 border border-red-200
rounded-2xl p-6">
            <p className="text-red-600 font-semibold mb-
2">Terjadi Kesalahan</p>
            <p className="text-red-500 mb-
4">{recipeError}</p>
            <button
                onClick={onBack}
                className="px-4 py-2 bg-red-600 text-white
rounded-lg hover:bg-red-700 transition-colors"
            >
                Kembali
            </button>
        </div>
    </div>
</div>
);
}

if (!recipe) {
    return (
        <div className="min-h-screen flex items-center
justify-center p-4">
            <div className="text-center">
                <p className="text-slate-600">Resep tidak
ditemukan</p>
                <button
                    onClick={onBack}
                    className={`mt-4 px-4 py-2 bg-
${colors.primary}-600 text-white rounded-lg hover:bg-
${colors.primary}-700 transition-colors`}
                >
                    Kembali
                </button>
            </div>
        </div>
    );
}

return (
    <div className={`min-h-screen bg-gradient-to-br
${colors.gradient} pb-20 md:pb-8`}>
        { /* Delete Confirmation Modal */ }
        <ConfirmModal
            isOpen={showDeleteModal}
            onClose={() => setShowDeleteModal(false)}
            onConfirm={handleDeleteRecipe}
            title="Hapus Resep"
            message={`Apakah Anda yakin ingin menghapus resep
"${recipe?.name}"? Tindakan ini tidak dapat dibatalkan.`}
            confirmText="Ya, Hapus"
            cancelText="Batal"
            variant="danger"
            isLoading={deleting}
        />

```

```

    { /* Header */ }
    <div className="sticky top-0 z-10 bg-white/80
backdrop-blur-md border-b border-slate-200 shadow-sm">
      <div className="max-w-4xl mx-auto px-4 py-4 flex
items-center justify-between">
        <button
          onClick={onBack}
          className="flex items-center gap-2 text-
slate-700 hover:text-slate-900 transition-colors"
        >
          <ArrowLeft className="w-5 h-5" />
          <span className="font-medium">Kembali</span>
        </button>

        { /* Action Buttons */ }
        {onEdit && (
          <div className="flex gap-2">
            <button
              onClick={() => {
                console.log('🖋️ Edit button clicked in
RecipeDetail');
                console.log('📄 Recipe ID:',
recipeId);
                console.log('🔧 onEdit function:',
onEdit);
                onEdit(recipeId);
              }}
              className="flex items-center gap-2 px-4
py-2 bg-blue-600 text-white rounded-lg hover:bg-blue-700
transition-colors"
            >
              <Edit className="w-4 h-4" />
              <span className="hidden
md:inline">Edit</span>
            </button>
            <button
              onClick={() => setShowDeleteModal(true)}
              className="flex items-center gap-2 px-4
py-2 bg-red-600 text-white rounded-lg hover:bg-red-700
transition-colors"
            >
              <Trash2 className="w-4 h-4" />
              <span className="hidden
md:inline">Hapus</span>
            </button>
          </div>
        )}
      </div>
    </div>

    <main className="max-w-5xl mx-auto px-4 py-8">
      { /* Recipe Header */ }
      <div className="bg-white/60 backdrop-blur-sm
rounded-3xl overflow-hidden shadow-xl border border-
white/40 mb-8">
        { /* Hero Image */ }

```

```

<div className="relative h-64 md:h-96 overflow-
hidden">
  <img
    src={recipe.image_url}
    alt={recipe.name}
    className="w-full h-full object-cover"
  />
  <div className="absolute inset-0 bg-gradient-
to-t from-black/60 via-transparent to-transparent" />

  {/* Favorite Button - Use component */}
  <div className="absolute top-4 right-4 z-10">
    <FavoriteButton recipeId={recipeId}
size="lg" />
  </div>

  {/* Category Badge */}
  <div className="absolute bottom-4 left-4">
    <span className={` ${colors.text}
${colors.bg} px-4 py-2 rounded-full text-sm font-
semibold`} >
      {category === 'makanan' ? 'Makanan' :
'Minuman'}
    </span>
  </div>
</div>

  {/* Recipe Info */}
  <div className="p-6 md:p-8">
    <h1 className="text-3xl md:text-4xl font-bold
text-slate-800 mb-4">
      {recipe.name}
    </h1>

    {recipe.description && (
      <p className="text-slate-600 text-lg mb-6
leading-relaxed">
        {recipe.description}
      </p>
    )}

    {/* Stats Grid */}
    <div className="grid grid-cols-2 md:grid-
cols-4 gap-4">
      <div className="bg-white/70 backdrop-blur
p-4 rounded-xl border border-white/60 text-center">
        <Clock className={`w-6 h-6 mx-auto mb-2
text-${colors.primary}-600`} />
        <p className="text-xs text-slate-500 mb-
1">Persiapan</p>
        <p className="font-semibold text-slate-
700">{recipe.prep_time}</p>
      </div>
      <div className="bg-white/70 backdrop-blur
p-4 rounded-xl border border-white/60 text-center">

```



```

        <Clock className={`w-6 h-6 mx-auto mb-2
text-${colors.primary}-600`} />
        <p className="text-xs text-slate-500 mb-
1">Memasak</p>
        <p className="font-semibold text-slate-
700">{recipe.cook_time} menit</p>
    </div>
    <div className="bg-white/70 backdrop-blur
p-4 rounded-xl border border-white/60 text-center">
        <Users className={`w-6 h-6 mx-auto mb-2
text-${colors.primary}-600`} />
        <p className="text-xs text-slate-500 mb-
1">Porsi</p>
        <p className="font-semibold text-slate-
700">{recipe.servings} orang</p>
    </div>
    <div className="bg-white/70 backdrop-blur
p-4 rounded-xl border border-white/60 text-center">
        <ChefHat className={`w-6 h-6 mx-auto mb-2
text-${colors.primary}-600`} />
        <p className="text-xs text-slate-500 mb-
1">Kesulitan</p>
        <p className={`font-semibold capitalize
${getDifficultyColor(recipe.difficulty)} `}>
            {recipe.difficulty}
        </p>
    </div>
</div>

    { /* Rating */ }
    { recipe.average_rating > 0 && (
        <div className="mt-6 flex items-center gap-
4 bg-amber-50 border border-amber-200 rounded-xl p-4">
            <div className="flex items-center gap-1">
                {[1, 2, 3, 4, 5].map((star) => (
                    <Star
                        key={star}
                        className={`w-5 h-5 ${
                            star <=
Math.round(recipe.average_rating)
                                ? 'text-amber-500 fill-current'
                                : 'text-slate-300'
                            } `}
                    />
                ))}
            </div>
            <div>
                <p className="text-lg font-bold text-
slate-800">
                    {recipe.average_rating.toFixed(1)}
                </p>
                <p className="text-xs text-slate-500">
                    {recipe.review_count} ulasan
                </p>
            </div>
        </div>
    ) }
</div>

```

```

    })
  </div>
</div>

  { /* Ingredients & Steps */ }
  <div className="grid md:grid-cols-2 gap-8 mb-8">
    { /* Ingredients */ }
    <div className="bg-white/60 backdrop-blur-sm
rounded-3xl p-6 md:p-8 shadow-xl border border-white/40">
      <h2 className="text-2xl font-bold text-slate-
800 mb-6 flex items-center gap-3">
        <div className={`w-10 h-10 rounded-full bg-
${colors.primary}-100 flex items-center justify-center`}>
          <span className={`text-${colors.primary}-
600 text-xl`}><img alt="Ingredients icon" data-bbox="415 325 435 345"/></span>
        </div>
        Bahan-bahan
      </h2>
      <ul className="space-y-3">
        {recipe.ingredients?.map((ingredient) => (
          <li
            key={ingredient.id}
            className="flex items-start gap-3 bg-
white/50 p-3 rounded-xl border border-white/60"
            >
            <span className={`text-
${colors.primary}-600 mt-1`}>•</span>
            <div>
              <p className="font-medium text-slate-
700">{ingredient.name}</p>
              <p className="text-sm text-slate-
500">{ingredient.quantity}</p>
            </div>
          </li>
        ))}
      </ul>
    </div>

    { /* Steps */ }
    <div className="bg-white/60 backdrop-blur-sm
rounded-3xl p-6 md:p-8 shadow-xl border border-white/40">
      <h2 className="text-2xl font-bold text-slate-
800 mb-6 flex items-center gap-3">
        <div className={`w-10 h-10 rounded-full bg-
${colors.primary}-100 flex items-center justify-center`}>
          <span className={`text-${colors.primary}-
600 text-xl`}><img alt="Steps icon" data-bbox="415 755 435 775"/></span>
        </div>
        Langkah-langkah
      </h2>
      <ol className="space-y-4">
        {recipe.steps?.map((step) => (
          <li
            key={step.id}
            className="flex gap-4 bg-white/50 p-4
rounded-xl border border-white/60"

```



```

                                star <= rating
                                ? 'text-amber-500 fill-
current'
                                : 'text-slate-300'
                                } hover:scale-110 transition-
transform`}
                                />
                                </button>
                                )}}
                                </div>
                                </div>

                                <div className="mb-4">
                                <label className="block text-sm font-
medium text-slate-700 mb-2">
                                Komentar
                                </label>
                                <textarea
                                value={comment}
                                onChange={ (e) =>
setComment(e.target.value)}
                                placeholder="Bagikan pengalaman Anda
dengan resep ini..."
                                rows={4}
                                className="w-full px-4 py-3 border
border-slate-300 rounded-xl focus:ring-2 focus:ring-blue-
500 focus:border-blue-500 bg-white resize-none"
                                />
                                </div>

                                <button
                                type="submit"
                                disabled={createLoading ||
!comment.trim()}
                                className={`w-full md:w-auto px-6 py-3
bg-${colors.primary}-600 text-white rounded-xl hover:bg-
${colors.primary}-700 transition-colors font-medium
disabled:opacity-50 disabled:cursor-not-allowed flex
items-center justify-center gap-2`}
                                >
                                <Send className="w-4 h-4" />
                                {createLoading ? 'Mengirim...' : 'Kirim
Ulasan'}
                                </button>
                                </form>
                                )}

                                {/* Reviews List */}
                                <div className="space-y-4">
                                {reviewsLoading ? (
                                <div className="text-center py-8">
                                <div className={`animate-spin rounded-
full h-8 w-8 border-b-2 border-${colors.primary}-600 mx-
auto`} ></div>
                                </div>
                                ) : reviews && reviews.length > 0 ? (

```

```

        reviews.map((review) => (
            <div
                key={review.id}
                className="bg-white/70 rounded-2xl p-6
border border-white/60"
            >
                <div className="flex items-start
justify-between mb-3">
                    <div>
                        <p className="font-semibold text-
slate-800">
                            {review.user_identifier}
                        </p>
                        <div className="flex items-center
gap-1 mt-1">
                            {[1, 2, 3, 4, 5].map((star) => (
                                <Star
                                    key={star}
                                    className={`w-4 h-4 ${
                                        star <= review.rating
                                        ? 'text-amber-500 fill-
current'
                                        : 'text-slate-300'
                                    }}`
                                />
                            ))}
                        </div>
                    </div>
                    <p className="text-sm text-slate-
500">
                        {formatDate(review.created_at)}
                    </p>
                </div>
                {review.comment && (
                    <p className="text-slate-700 leading-
relaxed">
                        {review.comment}
                    </p>
                )}
            </div>
        ))
    ) : (
        <div className="text-center py-8">
            <p className="text-slate-500">Belum ada
ulasan untuk resep ini.</p>
            <p className="text-slate-400 text-sm mt-
2">
                Jadilah yang pertama memberikan ulasan!
            </p>
        </div>
    )}
</div>
</main>
</div>
);

```

```
}
```

8. *Update file main.jsx untuk handle operasi CRUD yang baru ditambahkan Main.jsx*

```
// src/main.jsx
import { StrictMode, useState } from 'react'
import { createRoot } from 'react-dom/client'
import SplashScreen from './pages/SplashScreen';
import HomePage from './pages/HomePage';
import MakananPage from './pages/MakananPage';
import MinumanPage from './pages/MinumanPage';
import ProfilePage from './pages/ProfilePage';
import CreateRecipePage from './pages/CreateRecipePage';
import EditRecipePage from './pages/EditRecipePage';
import RecipeDetail from
'./components/recipe/RecipeDetail';
import DesktopNavbar from
'./components/navbar/DesktopNavbar';
import MobileNavbar from
'./components/navbar/MobileNavbar';
import './index.css'
import PWABadge from './PWABadge';

function AppRoot() {
  const [showSplash, setShowSplash] = useState(true);
  const [currentPage, setCurrentPage] = useState('home');
  const [mode, setMode] = useState('list'); // 'list',
'detail', 'create', 'edit'
  const [selectedRecipeId, setSelectedRecipeId] =
useState(null);
  const [selectedCategory, setSelectedCategory] =
useState('makanan');
  const [editingRecipeId, setEditingRecipeId] =
useState(null);

  const handleSplashComplete = () => {
    setShowSplash(false);
  };

  const handleNavigation = (page) => {
    setCurrentPage(page);
    setMode('list');
    setSelectedRecipeId(null);
    setEditingRecipeId(null);
  };

  const handleCreateRecipe = () => {
    setMode('create');
  };

  const handleRecipeClick = (recipeId, category) => {
    setSelectedRecipeId(recipeId);
    setSelectedCategory(category || currentPage);
  };
}
```

```

    setMode('detail');
  };

  const handleEditRecipe = (recipeId) => {
    console.log('✎ Edit button clicked! Recipe ID:',
recipeId);
    setEditingRecipeId(recipeId);
    setMode('edit');
    console.log('✅ Mode changed to: edit');
  };

  const handleBack = () => {
    setMode('list');
    setSelectedRecipeId(null);
    setEditingRecipeId(null);
  };

  const handleCreateSuccess = (newRecipe) => {
    alert('Resep berhasil dibuat!');
    setMode('list');
    // Optionally navigate to the new recipe's category
    if (newRecipe && newRecipe.category) {
      setCurrentPage(newRecipe.category);
    }
  };

  const handleEditSuccess = (updatedRecipe) => {
    alert('Resep berhasil diperbarui!');
    setMode('list');
  };

  const renderCurrentPage = () => {
    // Show Create Recipe Page
    if (mode === 'create') {
      return (
        <CreateRecipePage
          onBack={handleBack}
          onSuccess={handleCreateSuccess}
        />
      );
    }

    // Show Edit Recipe Page
    if (mode === 'edit') {
      return (
        <EditRecipePage
          recipeId={editingRecipeId}
          onBack={handleBack}
          onSuccess={handleEditSuccess}
        />
      );
    }

    // Show Recipe Detail
    if (mode === 'detail') {
      return (

```

```

        <RecipeDetail
            recipeId={selectedRecipeId}
            category={selectedCategory}
            onBack={handleBack}
            onEdit={handleEditRecipe}
        />
    );
}

// Show List Pages
switch (currentPage) {
    case 'home':
        return <HomePage
onRecipeClick={handleRecipeClick}
onNavigate={handleNavigation} />;
    case 'makanan':
        return <MakananPage
onRecipeClick={handleRecipeClick} />;
    case 'minuman':
        return <MinumanPage
onRecipeClick={handleRecipeClick} />;
    case 'profile':
        return <ProfilePage
onRecipeClick={handleRecipeClick} />;
    default:
        return <HomePage
onRecipeClick={handleRecipeClick}
onNavigate={handleNavigation} />;
}
};

if (showSplash) {
    return <SplashScreen
onComplete={handleSplashComplete} />;
}

return (
    <div className="min-h-screen bg-gray-50">
        {/* Only show navbar in list mode */}
        {mode === 'list' && (
            <>
                <DesktopNavbar
                    currentPage={currentPage}
                    onNavigate={handleNavigation}
                    onCreateRecipe={handleCreateRecipe}
                />
                <MobileNavbar
                    currentPage={currentPage}
                    onNavigate={handleNavigation}
                    onCreateRecipe={handleCreateRecipe}
                />
            </>
        )}

        {/* Main Content */}
        <main className="min-h-screen">

```



```

        {renderCurrentPage()}
      </main>

      <PWABadge />
    </div>
  );
}

createRoot(document.getElementById('root')).render(
  <StrictMode>
    <AppRoot />
  </StrictMode>,
)

```

9. Tambahkan helper di dalam folder src

Utils/helpers.js

```

// src/utils/helpers.js

/**
 * Format date to readable string
 * @param {string} dateString - ISO date string
 * @returns {string} - Formatted date
 */
export function formatDate(dateString) {
  if (!dateString) return '';

  const date = new Date(dateString);
  const options = {
    year: 'numeric',
    month: 'long',
    day: 'numeric',
  };

  return date.toLocaleDateString('id-ID', options);
}

/**
 * Format date to relative time (e.g., "2 hours ago")
 * @param {string} dateString - ISO date string
 * @returns {string} - Relative time string
 */
export function formatRelativeTime(dateString) {
  if (!dateString) return '';

  const date = new Date(dateString);
  const now = new Date();
  const diffInSeconds = Math.floor((now - date) / 1000);

  if (diffInSeconds < 60) {
    return 'Baru saja';
  }

  const diffInMinutes = Math.floor(diffInSeconds / 60);

```

```

    if (diffInMinutes < 60) {
      return `${diffInMinutes} menit yang lalu`;
    }

    const diffInHours = Math.floor(diffInMinutes / 60);
    if (diffInHours < 24) {
      return `${diffInHours} jam yang lalu`;
    }

    const diffInDays = Math.floor(diffInHours / 24);
    if (diffInDays < 7) {
      return `${diffInDays} hari yang lalu`;
    }

    const diffInWeeks = Math.floor(diffInDays / 7);
    if (diffInWeeks < 4) {
      return `${diffInWeeks} minggu yang lalu`;
    }

    const diffInMonths = Math.floor(diffInDays / 30);
    if (diffInMonths < 12) {
      return `${diffInMonths} bulan yang lalu`;
    }

    const diffInYears = Math.floor(diffInDays / 365);
    return `${diffInYears} tahun yang lalu`;
  }

  /**
   * Get difficulty badge color
   * @param {string} difficulty - Recipe difficulty
   * @returns {string} - Tailwind color classes
   */
  export function getDifficultyColor(difficulty) {
    const colors = {
      mudah: 'bg-green-100 text-green-800',
      sedang: 'bg-yellow-100 text-yellow-800',
      sulit: 'bg-red-100 text-red-800',
    };
    return colors[difficulty?.toLowerCase()] || 'bg-gray-100 text-gray-800';
  }

  /**
   * Get category icon/emoji
   * @param {string} category - Recipe category
   * @returns {string} - Emoji
   */
  export function getCategoryEmoji(category) {
    const emojis = {
      makanan: '🍲',
      minuman: '🥤',
    };
    return emojis[category?.toLowerCase()] || '🍷';
  }

```

```

/**
 * Validate rating (1-5)
 * @param {number} rating - Rating value
 * @returns {boolean} - Is valid
 */
export function isValidRating(rating) {
  return typeof rating === 'number' && rating >= 1 &&
rating <= 5;
}

/**
 * Generate star rating display
 * @param {number} rating - Rating value (0-5)
 * @returns {string} - Star string
 */
export function getStarRating(rating) {
  const fullStars = Math.floor(rating);
  const hasHalfStar = rating % 1 >= 0.5;
  const emptyStars = 5 - fullStars - (hasHalfStar ? 1 :
0);

  return '★'.repeat(fullStars) +
    (hasHalfStar ? '★' : '') +
    '☆'.repeat(emptyStars);
}

/**
 * Truncate text to specific length
 * @param {string} text - Text to truncate
 * @param {number} length - Max length
 * @returns {string} - Truncated text
 */
export function truncateText(text, length = 100) {
  if (!text) return '';
  if (text.length <= length) return text;
  return text.substring(0, length) + '...';
}

/**
 * Debounce function
 * @param {Function} func - Function to debounce
 * @param {number} wait - Wait time in ms
 * @returns {Function} - Debounced function
 */
export function debounce(func, wait = 300) {
  let timeout;
  return function executedFunction(...args) {
    const later = () => {
      clearTimeout(timeout);
      func(...args);
    };
    clearTimeout(timeout);
    timeout = setTimeout(later, wait);
  };
}

```

Utils/draftStorage.js

```
// src/utils/draftStorage.js

const DRAFT_KEY_PREFIX = 'recipe_draft_';
const DRAFT_TIMESTAMP_KEY = 'recipe_draft_timestamp';

/**
 * Save recipe draft to localStorage
 * @param {Object} draftData - Recipe draft data
 * @param {string} draftId - Unique identifier for the
 * draft (e.g., 'create' or recipeId for edit)
 */
export const saveDraft = (draftData, draftId = 'create')
=> {
  try {
    const key = `${DRAFT_KEY_PREFIX}${draftId}`;
    const timestamp = new Date().toISOString();

    const draft = {
      ...draftData,
      savedAt: timestamp,
    };

    localStorage.setItem(key, JSON.stringify(draft));
    localStorage.setItem(`${key}_${DRAFT_TIMESTAMP_KEY}`,
timestamp);

    console.log(`Draft saved: ${draftId} at
${timestamp}`);
    return true;
  } catch (error) {
    console.error('Error saving draft:', error);
    return false;
  }
};

/**
 * Load recipe draft from localStorage
 * @param {string} draftId - Unique identifier for the
 * draft
 * @returns {Object|null} Draft data or null if not found
 */
export const loadDraft = (draftId = 'create') => {
  try {
    const key = `${DRAFT_KEY_PREFIX}${draftId}`;
    const draftJson = localStorage.getItem(key);

    if (!draftJson) {
      return null;
    }

    const draft = JSON.parse(draftJson);
    console.log(`Draft loaded: ${draftId}`);
    return draft;
  }
};
```

```

    } catch (error) {
      console.error('Error loading draft:', error);
      return null;
    }
  };

  /**
   * Delete recipe draft from localStorage
   * @param {string} draftId - Unique identifier for the draft
   */
  export const deleteDraft = (draftId = 'create') => {
    try {
      const key = `${DRAFT_KEY_PREFIX}${draftId}`;
      localStorage.removeItem(key);

      localStorage.removeItem(`${key}_${DRAFT_TIMESTAMP_KEY}`);

      console.log(`Draft deleted: ${draftId}`);
      return true;
    } catch (error) {
      console.error('Error deleting draft:', error);
      return false;
    }
  };

  /**
   * Check if a draft exists
   * @param {string} draftId - Unique identifier for the draft
   * @returns {boolean} True if draft exists
   */
  export const hasDraft = (draftId = 'create') => {
    try {
      const key = `${DRAFT_KEY_PREFIX}${draftId}`;
      return localStorage.getItem(key) !== null;
    } catch (error) {
      console.error('Error checking draft:', error);
      return false;
    }
  };

  /**
   * Get draft timestamp
   * @param {string} draftId - Unique identifier for the draft
   * @returns {string|null} ISO timestamp or null
   */
  export const getDraftTimestamp = (draftId = 'create') => {
    try {
      const key = `${DRAFT_KEY_PREFIX}${draftId}`;
      return
      localStorage.getItem(`${key}_${DRAFT_TIMESTAMP_KEY}`);
    } catch (error) {

```

```

        console.error('Error getting draft timestamp:',
error);
        return null;
    }
};

/**
 * Get all draft IDs
 * @returns {string[]} Array of draft IDs
 */
export const getAllDraftIds = () => {
    try {
        const keys = Object.keys(localStorage);
        const draftKeys = keys.filter(key =>
key.startsWith(DRAFT_KEY_PREFIX) &&
!key.includes(DRAFT_TIMESTAMP_KEY));
        return draftKeys.map(key =>
key.replace(DRAFT_KEY_PREFIX, ''));
    } catch (error) {
        console.error('Error getting all draft IDs:', error);
        return [];
    }
};

/**
 * Clear all recipe drafts
 */
export const clearAllDrafts = () => {
    try {
        const draftIds = getAllDraftIds();
        draftIds.forEach(id => deleteDraft(id));
        console.log(`Cleared ${draftIds.length} drafts`);
        return true;
    } catch (error) {
        console.error('Error clearing all drafts:', error);
        return false;
    }
};

/**
 * Format draft timestamp for display
 * @param {string} timestamp - ISO timestamp
 * @returns {string} Formatted time ago
 */
export const formatDraftTime = (timestamp) => {
    if (!timestamp) return '';

    const now = new Date();
    const savedTime = new Date(timestamp);
    const diffMs = now - savedTime;
    const diffMins = Math.floor(diffMs / 60000);

    if (diffMins < 1) return 'Baru saja';
    if (diffMins < 60) return `${diffMins} menit yang
lalu`;

```

```

const diffHours = Math.floor(diffMins / 60);
if (diffHours < 24) return `${diffHours} jam yang
lalu`;

const diffDays = Math.floor(diffHours / 24);
if (diffDays < 7) return `${diffDays} hari yang lalu`;

return savedTime.toLocaleDateString('id-ID');
};

```

10. Atur icon/logo untuk PWA

Index.html

```

<!doctype html>
<html lang="id">
  <head>
    <meta charset="UTF-8" />
    <link rel="icon" href="/favicon.ico" sizes="48x48">
    <link rel="apple-touch-icon" href="/apple-touch-icon-
180x180.png">
    <meta name="viewport" content="width=device-width,
initial-scale=1.0" />

    <!-- PWA Meta Tags -->
    <meta name="theme-color" content="#ffffff" />
    <meta name="description" content="Resep Makanan dan
Minuman Indonesia" />
    <meta name="mobile-web-app-capable" content="yes" />
    <meta name="apple-mobile-web-app-capable"
content="yes" />
    <meta name="apple-mobile-web-app-status-bar-style"
content="default" />
    <meta name="apple-mobile-web-app-title"
content="Resep Nusantara" />

    <title>Resep Nusantara</title>
  </head>
  <body>
    <div id="root"></div>
    <script type="module" src="/src/main.jsx"></script>
  </body>
</html>

```

Vite.config.js

```

import { VitePWA } from 'vite-plugin-pwa';
import { defineConfig } from 'vite'
import tailwindcss from '@tailwindcss/vite'
import react from '@vitejs/plugin-react'

// https://vitejs.dev/config/
export default defineConfig({
  plugins: [react(), VitePWA(), tailwindcss(), ({

```

```

    registerType: 'autoUpdate',
    includeAssets: ['favicon.ico', 'robots.txt', 'apple-
touch-icon.png', 'LOGORN.png'],
    injectRegister: false,

    pwaAssets: {
      disabled: false,
      config: true,
    },

    manifest: {
      name: 'Resep Nusantara',
      short_name: 'Resep Nusantara',
      description: 'Aplikasi Resep Makanan dan Minuman
Khas Indonesia',
      theme_color: '#2563eb',
      background_color: '#ffffff',
      display: 'standalone',
      scope: '/',
      start_url: '/',
      orientation: 'portrait',
      icons: [
        {
          src: '/pwa-64x64.png',
          sizes: '64x64',
          type: 'image/png'
        },
        {
          src: '/pwa-192x192.png',
          sizes: '192x192',
          type: 'image/png'
        },
        {
          src: '/pwa-512x512.png',
          sizes: '512x512',
          type: 'image/png',
          purpose: 'any'
        },
        {
          src: '/maskable-icon-512x512.png',
          sizes: '512x512',
          type: 'image/png',
          purpose: 'maskable'
        }
      ]
    },

    workbox: {
      globPatterns: ['**/*.{js,css,html,svg,png,ico}'],
      cleanupOutdatedCaches: true,
      clientsClaim: true,
    },

    devOptions: {
      enabled: false,
      navigateFallback: 'index.html',
    }

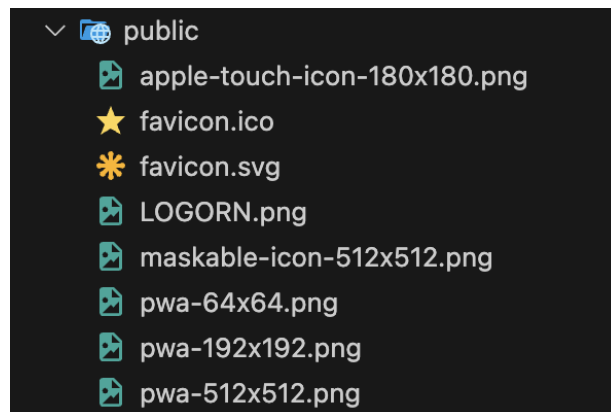
```



```
    suppressWarnings: true,  
    type: 'module',  
  },  
  })],  
})
```

Icon PWA Resep Nusantara

Link *download* [icon](#)



Gambar 6. 3 file icon PWA

11. *Install* semua *dependencies* yang dibutuhkan dan cek PWA kalian

```
npm install lucide-react  
npm install -D vite-plugin-pwa  
npm install tailwindcss @tailwindcss/vite  
npm install axios
```

Mode pengembangan

```
npm run dev
```

Mode Produksi

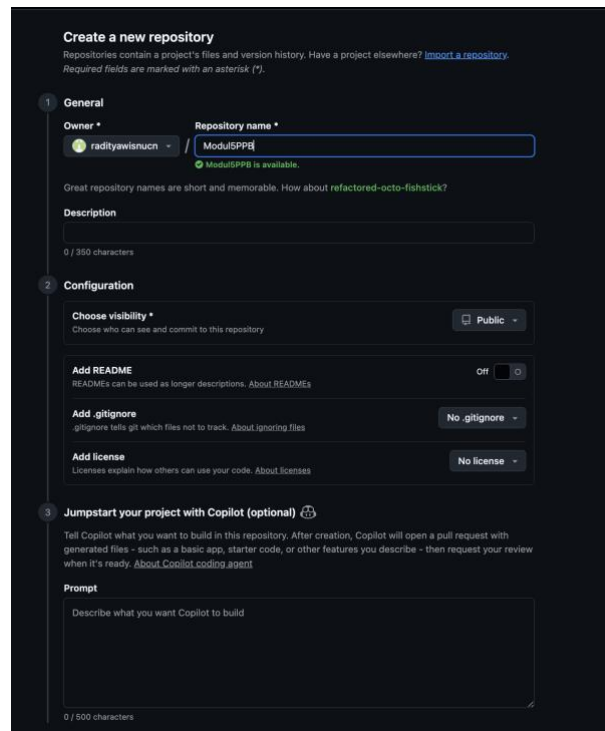
```
npm run build
```

6.4.3. *Deploy* PWA ke Vercel

1. Hapus *remote origin* lama (*remote repository* modul 4 sebelumnya) dengan *command* sebagai berikut

```
> git remote remove origin
```

2. Buat *repository* baru pada Github



Gambar 6. 4 Repository baru untuk modul 5

3. *Copy link repository* yang telah dibuat dan masukkan *command* berikut

```
> git remote add origin [link repo]
```

4. *Staged* perubahan kode yang ada pada *project* dengan *command* berikut

```
> git add .
```

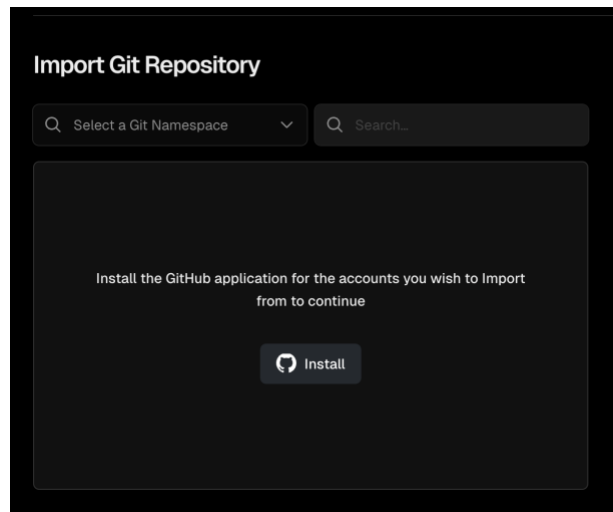
5. *Commit* perubahan dengan *command* berikut

```
> git commit -m "[isi dengan pesan kalian]"
```

6. *Push project* ke *repository* Github dengan *command* berikut

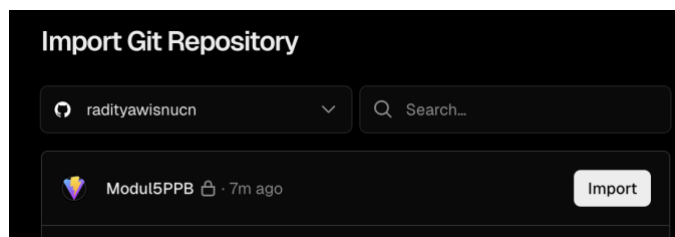
```
> git push -u origin main
```

7. Buka Vercel dan *login* menggunakan Github kemudian *install* Github *app* untuk mengakses *repository* kalian



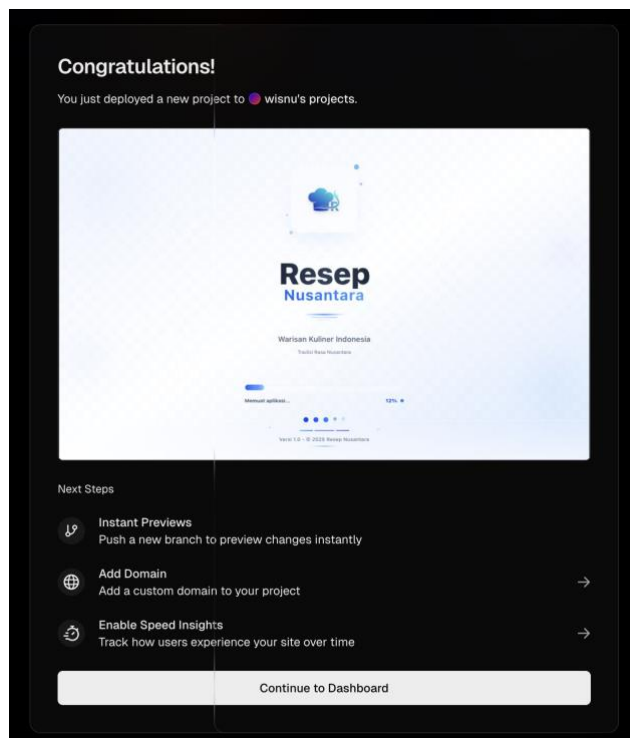
Gambar 6. 5 Import GitHub Repository

8. Pilih *repository* Github



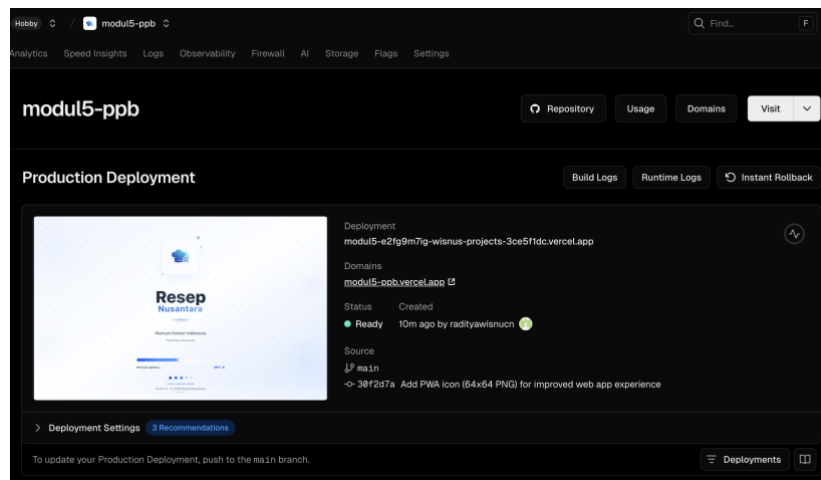
Gambar 6. 6 Pilih *repository* yang ingin di-deploy

9. *Import repository* percobaan dan PWA akan otomatis ter-deploy



Gambar 6. 7 PWA berhasil diunggah dan dapat diakses

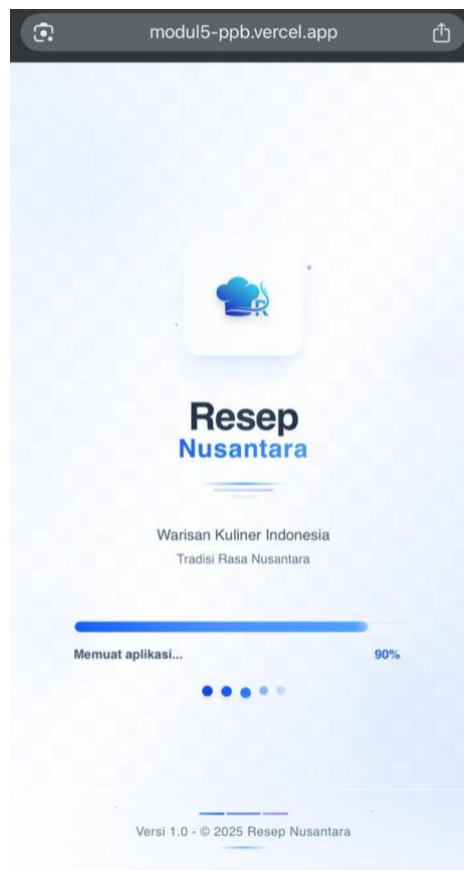
10. PWA bisa dicek di *domain* yang diberikan Vercel



Gambar 6. 8 Tampilan PWA pada Vercel

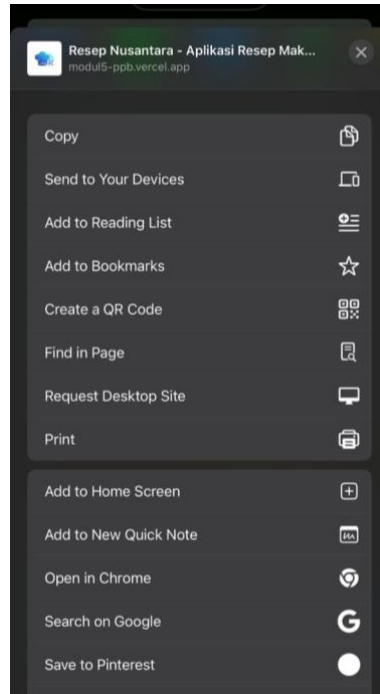
6.4.4. PWA pada Mobile

1. Buka *link* PWA yang telah di-*deploy*



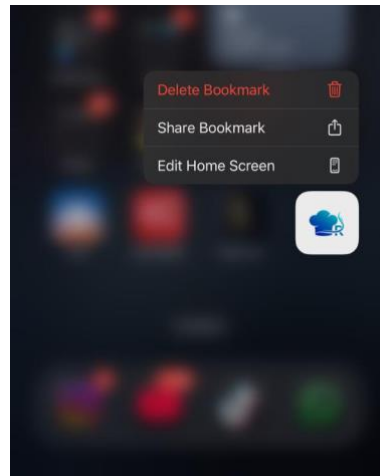
Gambar 6. 9 Buka *link* PWA

2. Klik *icon share* yang terletak di samping *link*, lalu *scroll* dan pilih “Add to Home Screen”



Gambar 6. 10 Add to Home Screen

3. PWA akan tampil pada *smartphone* kalian



Gambar 6. 11 Tampilan PWA pada *smartphone*