

# ACCESSIBILITY AUDIT REPORT

## PancakeSwap Decentralized Exchange

*pancakeswap.finance*

<b>Auditor</b>	<b>Abbas Ali</b>
Audit Method	Manual Screen Reader Testing — Android TalkBack (Single-finger gestures)
Device	Android Mobile (Chrome Browser)
Date	April 2026
Standard	WCAG 2.1 (Web Content Accessibility Guidelines)
Severity Scale	Critical / High / Medium / Low

### 1. Executive Summary

This report presents findings of a manual accessibility audit conducted on PancakeSwap, one of the most widely used decentralized exchanges (DEX) operating on BNB Chain and other networks. The audit was performed using Android TalkBack with single-finger swipe gestures, simulating the real-world experience of a blind or visually impaired user.

PancakeSwap is a leading DeFi platform used globally for token swaps, liquidity provision, and yield farming. Given its wide adoption, accessibility is critical for enabling blind users to participate in decentralized finance independently.

The audit identified significant accessibility barriers across multiple sections. Critical issues include navigation menu traps that lock TalkBack users inside menus with no escape, and unlabeled action buttons that leave blind users unable to identify core functions.

<b>Overall Accessibility Score</b>	<b>50 / 100</b>
Overall Rating	Poor — Significant Barriers Present
Total Issues Found	2 Primary Issues (Critical + Medium Severity)

### 2. Audit Scope

The following sections of the PancakeSwap web application were tested:

- Main navigation and header elements
- Side navigation menu and close button behavior
- Action buttons including Settings, Exchange/History, and Chart Info
- Promotional ad banners and their effect on TalkBack navigation
- Connect Wallet flow and interface behavior
- Full-page scroll from top to bottom

Areas not tested in this audit:

- Token swap transaction flow (requires connected wallet)
- Liquidity and farming sections
- Advanced DeFi features

### 3. Testing Methodology

All testing was conducted manually using the following tools and techniques:

Tool / Method	Details
Screen Reader	Android TalkBack — latest version
Navigation Method	Single-finger swipe gestures (standard TalkBack navigation)
Browser	Chrome for Android
Heading Navigation	Tested using TalkBack heading-by-heading navigation mode
Button Check	Focus placed on each element to verify TalkBack announcement
Focus Order Verification	Sequential swipe through entire page
Wallet Connection Flow	Accessed via Connect Wallet button

No automated testing tools were used. All findings are based on direct screen reader interaction by a blind auditor with lived experience using TalkBack daily.

### 4. Positive Findings

The following elements passed accessibility testing and function correctly with TalkBack:

Element	TalkBack Announcement	Status
Main Logo / Home Link	Announces correctly as link	Pass
Connect Wallet Button	Announces as button with label	Pass
Swap Tab	Announces correctly as tab	Pass
Main Token Input Fields	Announces with some context	Pass

### 5. Accessibility Issues Found

A total of 2 primary accessibility issues were identified. Each is documented below with location, impact, and recommended fix.

## Issue 1 — Navigation Menu Trap (Critical)

Field	Details
Location	Side navigation menu
Element Type	Menu open/close focus management
TalkBack Output	Focus does not move to Close button after menu opens
WCAG Criterion	2.1.2 No Keyboard Trap (Level A) and 4.1.3 Status Messages (Level AA)
Severity	Critical
Impact	Once the side menu is opened, TalkBack focus does not move to the Close button. Users cannot close the menu using standard TalkBack swipe gestures and are often forced to exit the site entirely. This is a complete blocker for blind navigation.
Recommended Fix	Implement <code>aria-modal="true"</code> on the menu container and use JavaScript focus management to move focus to the Close button immediately when the menu opens. Ensure pressing Escape or activating the Close button returns focus to the trigger element.

## Issue 2 — Unlabeled Action Buttons (High Severity)

Field	Details
Location	Main interface — top navigation area
Element Type	Icon-only interactive buttons: Settings (Gear), Exchange/History (Clock), Chart Info
TalkBack Output	Announces as "Unlabeled Button" for all three buttons
WCAG Criterion	4.1.2 Name, Role, Value (Level A)
Severity	High
Impact	Critical icons used daily by DeFi users are announced as Unlabeled Button. Blind users cannot identify or use Settings, History, or Chart functions. This prevents independent use of core platform features.
Recommended Fix	Add descriptive <code>aria-label</code> attributes to each SVG icon button. For example: <code>aria-label="Settings"</code> , <code>aria-label="Transaction History"</code> , <code>aria-label="Chart Information"</code> .

## Issue 3 — Focus Disruption from Ad Banners (Medium)

Field	Details
Location	Promotional banner sections throughout the page
Element Type	Ad and promotional cards
TalkBack Output	Focus jumps unexpectedly into ad cards during linear navigation

WCAG Criterion	2.4.3 Focus Order (Level A) and 1.3.2 Meaningful Sequence (Level A)
Severity	Medium
Impact	During linear swiping, TalkBack focus jumps unexpectedly into promotional ad cards, breaking the user's navigational flow. Users lose their position in the page.
Recommended Fix	Mark promotional banner elements with <code>aria-hidden="true"</code> if they are purely decorative, or ensure they are placed logically in the DOM focus order.

#### Issue 4 — Non-Accessible Wallet Connection Interface (Medium)

Field	Details
Location	Connect Wallet flow
Element Type	Wallet connection interface
TalkBack Output	Full interface shift without proper modal announcement
WCAG Criterion	4.1.3 Status Messages (Level AA) and 1.3.1 Info and Relationships (Level A)
Severity	Medium
Impact	The Connect Wallet action triggers a full interface shift rather than a standard accessible popup. TalkBack does not announce the new modal context, creating confusion for screen reader users during a critical action.
Recommended Fix	Implement proper <code>role="dialog"</code> with <code>aria-modal="true"</code> and <code>aria-labelledby</code> on the wallet connection interface. Move focus to the dialog on open and return focus to the trigger on close.

## 6. Issues Summary

Issue	Location	Severity
1. Navigation Menu Trap	Side navigation menu	Critical
2. Unlabeled Action Buttons	Main interface — Settings, History, Chart	High
3. Focus Disruption from Ad Banners	Promotional banner sections	Medium
4. Non-Accessible Wallet Interface	Connect Wallet flow	Medium

## 7. Recommendations

To improve TalkBack accessibility on PancakeSwap, the following actions are recommended:

- Implement proper focus management for the side navigation menu using `aria-modal` and JavaScript focus trapping.

- Audit all icon-only buttons across the platform and add descriptive aria-label attributes to every interactive SVG element.
- Mark all purely decorative promotional banners with aria-hidden="true" to prevent focus disruption during navigation.
- Implement standard accessible modal patterns for the Connect Wallet interface using role="dialog" and aria-modal.
- Test all critical user flows with a real screen reader user before each release.
- Follow WCAG 2.1 Level AA as the minimum standard across all interactive components.

## 8. Auditor Note

This audit was conducted by Abbas Ali, a blind accessibility specialist and TalkBack user based in Pakistan. All findings are based on direct first-hand experience navigating the PancakeSwap application using TalkBack as the primary means of device interaction.

PancakeSwap is a widely used DeFi platform, but its current accessibility barriers prevent blind users from navigating it independently and safely. The navigation menu trap alone is a complete blocker. With targeted fixes, PancakeSwap can become a genuinely inclusive platform for all DeFi participants.

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*End of Report*