Responsiveness and Functionality Testing Documentation

Device Testing Matrix

Desktop Browsers

- Chrome (v120+) - 1920x1080, 1440x900
- Firefox (v120+) - 1920x1080, 1440x900
- Safari (v17+) - 1440x900
- Edge (v120+) - 1920x1080

Mobile Devices

- iPhone 13/14 (390x844)
- iPhone SE (375x667)
- Samsung Galaxy S21 (360x800)
- iPad Air (820x1180)
- iPad Mini (768x1024)

Feature Testing Checklist

Navigation

- [x] Header stays fixed on scroll
- [x] Mobile menu toggle works
- [x] Menu items correctly collapse on mobile
- [x] Smooth transitions between menu states

Hero Section

- [x] Currency converter responsive layout
- [x] Floating coins visible and animated
- [x] Input fields maintain functionality
- [x] Dropdown menus accessible on touch devices

Features Section

- [x] Image scales correctly on different screens
- [x] Text remains readable at all sizes
- [x] Content properly aligned at breakpoints
- [x] No horizontal overflow issues

Feature Cards

- [x] Grid layout adapts to screen size
- [x] Cards maintain proper spacing
- [x] Images scale without distortion
- [x] Content remains centered and legible

Critical Breakpoints Verified

- 1200px (Container max-width)
- 992px (Desktop to tablet)
- 768px (Tablet to mobile)
- 576px (Mobile layout adjustments)

Performance Metrics

- First Contentful Paint: < 1.5s
- Time to Interactive: < 2.5s
- Layout Shift Score: < 0.1

Touch Interaction Testing

- [x] All buttons have min 44x44px touch targets
- [x] Dropdowns function on touch devices
- [x] Scrolling smooth on mobile devices
- [x] No accidental triggers of hover states

Known Issues & Solutions

1. Currency converter dropdown position on mobile
   - Fixed with absolute positioning and z-index
adjustments
2. Image scaling on ultra-wide screens
   - Implemented max-width constraints
3. Font size readability on small devices
   - Added mobile-specific typography scale

Accessibility Checks

- [x] Color contrast ratios meet WCAG standards
- [x] Interactive elements keyboard accessible
- [x] Proper ARIA labels implemented
- [x] Screen reader compatibility verified

Cross-browser Compatibility

Feature	Chrome	Firefox	Safari	Edge
Animations	✓	✓	✓	✓
Flexbox	✓	✓	✓	✓
Grid	✓	✓	✓	✓
CSS Variables	✓	✓	✓	✓