

# Website Testing Checklist (Advanced Level)

## 1. Functional Testing

- Forms & Validations:
  - Form submit karte time required fields check karo.
  - Invalid data (like wrong email format) dalne pe error show hona chahiye.
  - Success message dikhna chahiye jab form submit ho.
- Navigation & Links:
  - Saare links (internal/external) kaam karna chahiye, broken nahi hone chahiye.
  - Back/Forward buttons browser ke sahi kaam karna chahiye.
- User Actions:
  - Login/Logout, Signup, Password reset sab sahi se work karna chahiye.
  - Add to cart, checkout, payment process test karo.

## 2. Performance Testing

- Page Load Speed:
  - Heavy images/videos ke wajah se slow nahi hona chahiye.
  - Tools like Google PageSpeed Insights se check karo.
- Load Handling:
  - 1000+ users aaye toh bhi server crash nahi hona chahiye (use JMeter/LoadRunner).

## 3. Security Testing

- SQL Injection/XSS:
  - Hackers input field mein malicious code daal sake? Check karo.
- Authentication:
  - Without login, direct URL se access nahi milna chahiye.
  - Brute force attack se protect hona chahiye (Captcha/Otp).

## 4. Compatibility Testing

- Browser Check:
  - Chrome, Firefox, Safari, Edge – sab pe same dikhna chahiye.
- Mobile Responsiveness:

- Mobile (Android/iOS) aur tablet pe layout break nahi hona chahiye.

## 5. Database Testing

- Data Integrity:
  - Form submit karne pe database mein sahi data save hona chahiye.
  - Delete/Update operations sahi se reflect hone chahiye.

## 6. API Testing (if applicable)

- Endpoints Check:
  - POST, GET, PUT, DELETE requests sahi response dena chahiye.
  - Wrong API key dena pe error aana chahiye.

## 7. UI/UX Testing

- Design Consistency:
  - Fonts, colors, buttons sab pages pe same hone chahiye.
- User-Friendly:
  - Important buttons easily visible hone chahiye.

## 8. Accessibility Testing

- Screen Readers:
  - Blind users ke liye ALT text images ka hona chahiye.
- Keyboard Navigation:
  - Mouse ke bina bhi website use kar sake.

## 9. Payment Gateway Testing (for E-commerce)

- Successful/Failed Transactions:
  - Payment hone ke baad confirmation mail/SMS aana chahiye.
  - Fake card details pe decline hona chahiye.

## 10. Legal & Compliance

- GDPR/Cookie Policy:
    - User consent lena chahiye cookies ke liye.
  - Terms & Conditions/Privacy Policy links sahi hona chahiye.
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Final Tip: Automation tools (Selenium, Cypress) use karo repetitive tests ke liye, manual testing creative parts ke liye karo.

## Advanced Website Testing Checklist (Pro Level)

Agar tum advanced-level testing karna chahte ho, toh yeh extra deep checks karo:

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### 1. Functional Testing (Advanced)

#### ✓ Multi-Step Workflows

- Example: E-commerce checkout (Cart → Address → Payment → Confirmation) mein data loss nahi hona chahiye.
- Browser refresh karne pe bhi data retain hona chahiye.

#### ✓ Session & Cookies Testing

- Logout karne ke baad, back button dabane pe account re-open nahi hona chahiye.
- Incognito mode mein session expire hona chahiye.

#### ✓ Third-Party Integrations

- Google/Facebook login sahi kaam karna chahiye.
- Payment gateways (Razorpay, Stripe) ke sandbox mode mein test karo.

#### ✓ Dynamic Content (AJAX/API Calls)

- Infinite scroll, live search, auto-suggestions sahi load hone chahiye.
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### 2. Performance Testing (Advanced)

#### ⚡ Stress & Spike Testing

- 10,000 users ek saath aaye toh bhi server handle kare? (Use JMeter/Gatling)

#### ⚡ Database Query Optimization

- Slow SQL queries check karo (MySQL slow query log).
- Caching (Redis, Varnish) enable hai ya nahi?

#### ⚡ CDN & Asset Optimization

- Static files (CSS/JS/Images) CDN se load ho rahe hai?
  - GZIP compression enable hai?
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### 3. Security Testing (Advanced)

#### 🔒 OWASP Top 10 Vulnerabilities

- SQL Injection → `' OR '1'='1` daal ke test karo.
- XSS (Cross-Site Scripting) → `<script>alert(1)</script>` daal ke dekho.
- CSRF (Cross-Site Request Forgery) → Check if sensitive actions require tokens.

#### 🔒 Rate Limiting & DDoS Protection

- 100 requests/second karne pe block hona chahiye.

#### 🔒 Data Encryption

- HTTPS (TLS 1.2/1.3) enforce ho raha hai?
  - Credit card details hashed store hote hai? (PCI-DSS Compliance)
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### 4. API Testing (Advanced)

#### 🔧 Webhooks & Real-Time APIs

- Slack/WhatsApp notifications sahi trigger ho rahe hai?
- Webhook payloads sahi parse ho rahe hai?

### GraphQL Testing

- Nested queries bhejo, response time check karo.
- Introspection disable hai? (Security best practice)

### WebSocket Testing

- Real-time chat apps mein messages drop nahi hone chahiye.
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## 5. DevOps & Deployment Checks

### CI/CD Pipeline Testing

- Automated tests (Selenium, Cypress) CI/CD mein integrate hai?
- Deployment ke baad auto-rollback feature hai?

### Database Migrations

- Schema update karne pe existing data corrupt nahi hona chahiye.

### Load Balancer & Failover

- Ek server down hua, toh traffic automatically dusre server pe shift hona chahiye.
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## 6. Microservices & Serverless Testing

### AWS Lambda / Azure Functions

- Cold start time acceptable hai?
- API Gateway permissions sahi configure hai?

### Kubernetes (K8s) Testing

- Auto-scaling sahi kaam kar raha hai?
- Pods crash hone pe auto-restart hote hai?

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## 7. AI & Machine Learning Testing



### Recommendation Engines

- "Frequently Bought Together" suggestions logical hai?



### Chatbots/NLP Testing

- Gibberish input pe chatbot crash nahi hona chahiye.
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## 8. Blockchain & Web3 Testing (If Applicable)



### Smart Contract Testing

- Ethereum/Solidity contracts mein reentrancy attack possible hai?



### Wallet Integrations (MetaMask, Phantom)

- Transaction signing sahi work kar raha hai?
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### Final Pro Tip:

- Chaos Engineering try karo (Netflix ke Chaos Monkey ki tarah) → Randomly servers crash karke system resilience check karo.
- Automate 80% tests (Selenium, Postman, Cypress) & Manual 20% (UX, Edge Cases).