

# Wolt Frontend Best Practices Cheat Sheet

Based on the "Wolt Frontend Best Practices & How to Nail the Technical Interview" presentation for Hive Helsinki students (January 2026)

## 1. What Makes Good Frontend Code?

Five qualities that define good frontend code:

Quality	Description
Clarity	Easy to read, easy to explain
Accessible	Works for everyone, not just mouse + screen users
Predictable	Behaves the same way every time
Testable	Important logic can be verified in isolation
Maintainable	Small changes do not cause surprises

## 2. Accessibility & Semantics (a11y)

"If it only works with a mouse and perfect vision, it is not finished yet."

### Good Practices

- Use semantic HTML ( button , label , form , nav , table )
- For numeric input: prefer input[ type = "text" ] + inputmode instead of input[ type = "number" ] [read more](#), [read more](#)
- Learn and use basic ARIA attributes for enhanced accessibility
- Provide clear instructions for expected input formats (password format)

### Why It Matters

- Screen readers, keyboards, and assistive tech rely on semantics
- Better accessibility usually means better UX for everyone
- Interviewers notice when you care about this

### Quick Example

```
<!-- Bad: div with click handler -->
<div onclick="submit()">Submit</div>

<!-- Good: semantic button -->
<button type="submit">Submit</button>
```

### Input Format Instructions - Examples

Input Type	Example Instruction
Password	"8+ characters, 1 uppercase, 1 number, 1 special character"
Coordinates	"Latitude, Longitude (e.g., 60.1699, 24.9384)"
Phone number	" <b>+358 40 123 4567</b> " or "Include country code"
Date	"DD/MM/YYYY" or show a placeholder like "25/01/2026"
Time	"HH:MM (24-hour format)" or "e.g., 14:30"
Postal code	"5 digits" (varies by country)

Input Type	Example Instruction
Credit card	"16 digits, no spaces"
Currency	"Amount in EUR (e.g., 12.50)"
File upload	"PNG or JPG, max 5MB"
Username	"3-20 characters, letters and numbers only"
URL	"Include https:// (e.g., <a href="https://example.com">https://example.com</a> )"

## How to Show Format Instructions in HTML

```
<!-- Using placeholder -->
<input type="text" placeholder="60.1699, 24.9384" />

<!-- Using aria-describedby (best for screen readers!) -->
<label for="coords">Coordinates</label>
<input type="text" id="coords" aria-describedby="coords-hint" />
<small id="coords-hint">Format: latitude, longitude (e.g., 60.1699, 24.9384)</small>

<!-- Using pattern + title for validation hint -->
<input
  type="text"
  pattern="[0-9]{5}"
  title="5 digit postal code"
/>
```

Tip: The `aria-describedby` approach is best for accessibility because screen readers announce the hint when the user focuses the input.

## 3. UX, UI & Polish

"Good UX is about removing friction, not adding decoration."

### Good Practices

- **Loading states:** spinners, skeletons, disabled actions
- **Locale-aware formatting:** numbers, currency, dates using user's locale
- **Theme support:** light and dark mode
- **Visual polish:** spacing, hierarchy, subtle animations
- **Brand colors:** use tastefully, not excessively

### Why It Matters

- Users trust interfaces that feel responsive and consistent
- Clear feedback prevents repeated actions and errors
- Small polish details signal care and professionalism

## 4. Separation of Concerns

"Structure your code so each responsibility is clear and isolated."

### Concerns to Separate

1. Input validation
2. Submit / action logic
3. Communication with APIs
4. Parsing and validating API responses
5. Business logic
6. Output formatting for display

### Simple Frontend Structure

```
graph LR
    subgraph Component ["Component"]
        direction TB
        C1["Handles input and rendering"]
        C2["- Reads user input"]
        C3["- Manages UI state"]
        C4["- Renders UI based on data"]
        C5["- No business rules"]
    end

    subgraph Pure ["Pure Functions"]
        direction TB
        P1["Calculations & decisions"]
        P2["- No side effects"]
        P3["- Same input → same output"]
        P4["- Easy to test"]
        P5["- Contains business logic"]
    end

    subgraph Service ["Service"]
        direction TB
        S1["External communication"]
        S2["- API calls"]
        S3["- Data fetching"]
        S4["- Error handling"]
        S5["- No UI logic"]
    end

    Component --> Pure
    Pure --> Service

    style Component stroke:#00c2e8,stroke-width:2px
    style Pure stroke:#00c2e8,stroke-width:2px
    style Service stroke:#00c2e8,stroke-width:2px
```

Examples by Layer

Layer	Examples
Pure Functions	isEmailValid(email), calculateTotal(items)
Service	fetchUsers(), submitForm(data), loadProfile(id)

5. Testing

"Testing is easier when your code is structured well."

Good Practices

- Prefer testing **small, pure functions**
- Focus tests on **business logic** and **data parsing**
- Test **edge cases** and **invalid inputs**
- Keep tests **fast and deterministic**

What to Avoid

- Large tests that require rendering everything
- Heavy mocking of UI and network layers
- Testing implementation details instead of behavior

Why It Matters

- Tests give confidence to refactor
  - Failures are easier to understand and fix
  - Interviewers care more about *what* you test than the testing library
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## Bad Example: Big Function with Heavy Mocking

This approach makes it hard to know where failures occur:

```
// The function does too much
async function processOrder(orderId: string) {
  const response = await fetch(`/api/orders/${orderId}`)
  const order = await response.json()

  let total = 0
  for (const item of order.items) {
    total += item.price * item.quantity
  }

  if (order.discountCode === "SAVE10") {
    total = total * 0.9
  }

  if (order.country === "IT") {
    total = total * 1.22
  }

  return Math.round(total * 100) / 100
}
```

```
// Test requires heavy mocking
global.fetch = vi.fn(() =>
  Promise.resolve({
    json: () =>
      Promise.resolve({
        items: [{ price: 10, quantity: 2 }],
        discountCode: "SAVE10",
        country: "IT",
      }),
  }) as any
)

it("calculates total price", async () => {
  const total = await processOrder("123")
  expect(total).toBe(21.96)
})
```

**Problem:** If the test fails, we don't know which part broke.

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## Good Example: Small Single-Responsibility Functions

```
type Order = {
  items: { price: number; quantity: number }[]
  discountCode?: string
  country: string
}

function calculateSubtotal(items: Order["items"]) {
  return items.reduce(
    (sum, item) => sum + item.price * item.quantity,
    0
  )
}

function applyDiscount(total: number, code?: string) {
  return code === "SAVE10" ? total * 0.9 : total
}

function applyTax(total: number, country: string) {
  if (country === "IT") return total * 1.22
  return total
}

function roundMoney(amount: number) {
  return Math.round(amount * 100) / 100
}
```

```
// Clean, focused tests - no mocking needed!

it("applies Italian tax", () => {
  expect(applyTax(10, "IT")).toBe(12.2)
})

it("applies discount", () => {
  expect(applyDiscount(100, "SAVE10")).toBe(90)
})

it("calculates subtotal", () => {
  expect(
    calculateSubtotal([{ price: 5, quantity: 2 }])
  ).toBe(10)
})
```

**Benefit:** If something goes wrong, we know exactly where.

## Quick Reference Summary

Topic	Key Takeaway
Good Code	Clarity, Accessible, Predictable, Testable, Maintainable
Accessibility	Use semantic HTML, ARIA, keyboard support
UX/Polish	Loading states, locale formatting, theme support
Separation	Component → Pure Functions → Service
Testing	Small pure functions, no heavy mocking, test behavior

## Interview Tips

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1. **Show you care about accessibility** - it stands out
  2. **Explain your separation of concerns** - interviewers love clean architecture
  3. **Write testable code** - what you test matters more than the library
  4. **Think about edge cases** - invalid inputs, loading states, errors
  5. **Keep it simple** - don't over-engineer, showing thinking and reasoning is more important than hacks
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