

Responsive Layout Evidence Matrix v1

Responsive CSS: Grid, Flex, and Logical Properties

Outcome. Design a bounded responsive layout by choosing Grid or Flex for the actual layout problem, using writing-mode-relative logical properties where appropriate, and proving behavior across widths and directions without corrupting logical source order.

Evidence gate. Accept only evidence that covers wide and narrow states, LTR and RTL direction, critical overflow, logical source order, a detected mutation, repair, transfer, and a residual limitation.

Source Structure to Responsive Evidence

01 SOURCE ORDER Authority: Defines reading and default focus sequence Boundary: Do not use CSS placement to repair a broken semantic sequence	02 CONTENT CONSTRAINT Authority: Reveals intrinsic size, min-content pressure, and wrapping needs Boundary: Breakpoint decisions follow content failure, not device labels	03 LAYOUT MODEL Authority: Grid coordinates rows and columns; Flex distributes along one primary axis Boundary: Choose per container and geometry, not by habit
04 RESPONSIVE STATE Authority: Changes tracks, flow, wrapping, or stacking when constraints require it Boundary: Keep state changes few, observable, and justified	05 DIRECTION Authority: Uses logical properties for writing-mode-relative spacing and placement Boundary: Logical layout properties do not replace bidi text handling	06 EVIDENCE Authority: Records overflow, visual sequence, DOM sequence, and mutation results Boundary: A screenshot alone cannot prove source-order correctness

Identity, decision, and claim boundary

Learner		Reviewer	
Case / attempt		Capture date	
Scenario / concern		Decision	ACCEPT / REPAIR / DEFER

Claim boundary. This is a bounded executable lab. Retain implementation, applicable runtime, browser, DOM, or tool observations, mutation, repair, transfer, and residual-limit evidence; one passing checker is not whole-system proof. No responsive-layout claim is accepted from appearance alone; retain constraint, direction, overflow, DOM order, mutation, repair, and transfer evidence.

Required record fields and evidence tests

A field is complete only when its value is bounded, traceable, and classified. Use UNKNOWN when the required observation is unavailable or contradictory.

Field	Question to close	Minimum evidence	Invalid promotion
scenario	What does scenario mean in this case?	Bounded scenario fact, source, or observable	Inference can be relabeled as observation
region	What does region mean in this case?	Bounded scenario fact, source, or observable	Inference can be relabeled as observation
source_order_contract	What does source order contract mean in this case?	Bounded scenario fact, source, or observable	Inference can be relabeled as observation
layout_problem	What does layout problem mean in this case?	Bounded scenario fact, source, or observable	Inference can be relabeled as observation
chosen_model	What does chosen model mean in this case?	Bounded scenario fact, source, or observable	Inference can be relabeled as observation
state_constraint	What remains outside state constraint?	Explicit unknown, constraint, or non-claim	Missing evidence is hidden or converted to confidence
direction	What does direction mean in this case?	Bounded scenario fact, source, or observable	Inference can be relabeled as observation
logical_property_decision	How is logical property decision bounded and justified?	Allowed classification, reason, boundary, and reviewer	A page-wide label replaces row-level analysis
overflow_observation	What does overflow observation mean in this case?	Bounded scenario fact, source, or observable	Inference can be relabeled as observation
visual_order_observation	What does visual order observation mean in this case?	Bounded scenario fact, source, or observable	Inference can be relabeled as observation
source_order_observation	What does source order observation mean in this case?	Bounded scenario fact, source, or observable	Inference can be relabeled as observation
mutation	What does mutation mean in this case?	Bounded scenario fact, source, or observable	Inference can be relabeled as observation
repair	What does repair mean in this case?	Bounded scenario fact, source, or observable	Inference can be relabeled as observation
residual_limitation	What remains outside residual limitation?	Explicit unknown, constraint, or non-claim	Missing evidence is hidden or converted to confidence

Evidence and failure states

Evidence: OBSERVED / INFERRED / UNKNOWN. Decisions: ACCEPT / REPAIR / DEFER. Failure layers: SOURCE_ORDER / INTRINSIC_SIZE / GRID / FLEX / DIRECTION / OVERFLOW.

Responsive Layout Decision and Evidence Matrix

English support projection from derived_text/tables/WEB-010-TAB1.example.en-US.json. This example demonstrates field relationships; it does not supply the learner's transfer or final decision evidence.

Field	Governed example value	Evidence question	Boundary check
scenario	baseline-wide-ltr	What observation supports scenario?	Is the conclusion no stronger than this value?
region	results	What observation supports region?	Is the conclusion no stronger than this value?
source_order_contract	filter before results in DOM; card internal DOM order unchanged	What observation supports source order contract?	Is the conclusion no stronger than this value?
layout_problem	stable filter and results alignment	What observation supports layout problem?	Is the conclusion no stronger than this value?
chosen_model	GRID	What observation supports chosen model?	Is the conclusion no stronger than this value?
state_constraint	space permits two coordinated columns	What observation supports state constraint?	Is the conclusion no stronger than this value?
direction	LTR	What observation supports direction?	Is the conclusion no stronger than this value?
logical_property_decision	use inline and block relative spacing for directional intent	What observation supports logical property decision?	Is the conclusion no stronger than this value?
overflow_observation	to be observed	What observation supports overflow observation?	Is the conclusion no stronger than this value?
visual_order_observation	to be observed	What observation supports visual order observation?	Is the conclusion no stronger than this value?
source_order_observation	to be observed	What observation supports source order observation?	Is the conclusion no stronger than this value?
mutation	none in baseline	What observation supports mutation?	Is the conclusion no stronger than this value?
repair	none in baseline	What observation supports repair?	Is the conclusion no stronger than this value?
residual_limitation	environment-specific observation	What observation supports residual limitation?	Is the conclusion no stronger than this value?
Source-package validation	ACCEPTED_IMPORTABLE; 0 blockers; 0 warnings · QA_ACCEPTED_ELIGIBLE		

Complete Responsive Layout Evidence Matrix v1

Enter one bounded value per required field. Every material entry needs an evidence locator and a state. Use additional workbook rows when the artifact needs multiple concerns, responsibilities, resources, or path steps.

Required field	Learner value	Evidence locator	State / review note
scenario			OBSERVED / INFERRED / UNKNOWN
region			OBSERVED / INFERRED / UNKNOWN
source_order_contract			OBSERVED / INFERRED / UNKNOWN
layout_problem			OBSERVED / INFERRED / UNKNOWN
chosen_model			OBSERVED / INFERRED / UNKNOWN
state_constraint			OBSERVED / INFERRED / UNKNOWN
direction			OBSERVED / INFERRED / UNKNOWN
logical_property_decision			OBSERVED / INFERRED / UNKNOWN
overflow_observation			OBSERVED / INFERRED / UNKNOWN
visual_order_observation			OBSERVED / INFERRED / UNKNOWN
source_order_observation			OBSERVED / INFERRED / UNKNOWN
mutation			OBSERVED / INFERRED / UNKNOWN
repair			OBSERVED / INFERRED / UNKNOWN
residual_limitation			OBSERVED / INFERRED / UNKNOWN

Human closure

Decision	ACCEPT / REPAIR / DEFER	Reviewer	
Residual uncertainty		Consequence	
Smallest next evidence		Evidence owner / date	

Run → observe → mutate → repair → transfer

Run the bounded fixture and retain observable results. Predict each deliberate mutation before executing it, then prove the repair and changed-context transfer.

Case	Bounded concern or change	Provisional decision	Deciding evidence	Learner observation	Stable / unresolved boundary
SOURCE CONTRACT	Write the documentation workspace sequence before styling	The article remains understandable when CSS is removed	DOM order inspection and a CSS-disabled reading pass	<div></div>	<div></div>
TWO-TRACK REGION	Use Grid for the wide section-index and article relationship	Tracks align while the article can shrink below its min-content width	Computed layout plus narrow-width overflow observation	<div></div>	<div></div>
UTILITY STRIP	Use Flex for a one-axis row of search and actions	Items wrap or compress according to the stated constraint	Wide and narrow state observations with long labels	<div></div>	<div></div>
DIRECTION SWITCH	Replace physical margins with logical spacing and test RTL	Directional spacing follows inline start and end	LTR and RTL screenshots plus unchanged DOM sequence	<div></div>	<div></div>

Reasoning sequence

Phase	Action	Required capture	Truth rule
Boundary	Run the structural check on the supplied fixture.	Scenario fact, evidence locator, or explicit UNKNOWN	No responsive-layout claim is accepted from appearance alone; retain constraint, direction, overflow, DOM order, mutation, repair, and transfer evidence.
Boundary	Observe wide and narrow layouts in LTR and RTL.	Scenario fact, evidence locator, or explicit UNKNOWN	No responsive-layout claim is accepted from appearance alone; retain constraint, direction, overflow, DOM order, mutation, repair, and transfer evidence.
Boundary	Record DOM order, overflow, and the chosen layout model for each region.	Scenario fact, evidence locator, or explicit UNKNOWN	No responsive-layout claim is accepted from appearance alone; retain constraint, direction, overflow, DOM order, mutation, repair, and transfer evidence.
Stress test	Force min-content pressure with a long token.	Prediction, changed assumption, stable boundary, next evidence	A plausible counterexample does not become an observed implementation fact
Stress test	Switch document direction without changing source order.	Prediction, changed assumption, stable boundary, next evidence	A plausible counterexample does not become an observed implementation fact
Stress test	Enable a visual-reorder mutation and compare the visual and DOM sequences.	Prediction, changed assumption, stable boundary, next evidence	A plausible counterexample does not become an observed implementation fact

Guardrail. Responsive layout is a constraint decision; visual reordering is not a substitute for logical source order.

Changed-context transfer

Repair the changed documentation-layout fixture independently, justify each Grid or Flex choice, and retain width, direction, overflow, and source-order evidence.

Transfer item	Changed-context requirement	Learner evidence	Review check
Scenario	State the changed concern, resource, or responsibility boundary.	_____	Worked scenario not copied
Observed facts	Record only facts supplied or directly observed.	_____	Inference stays separate
Concern split	Create separate rows for independent responsibilities or paths.	_____	No page-wide shortcut
Classification	Choose only ACCEPT / REPAIR / DEFER or preserve UNKNOWN.	_____	Placement is justified
Failure probe	Apply one counterexample that tests an over-broad claim.	_____	No invented mechanism
Non-claims	State at least two limits plus the smallest next evidence.	_____	Residual and next evidence stated

Non-compensatory review

Critical dimension	PASS / REPAIR	Evidence locator	Repair or rationale
Scenario and responsibility boundary correctness	_____ _____	_____	_____
Observation, inference, and source traceability	_____ _____	_____	_____
Decision rationale and next-evidence quality	_____ _____	_____	_____
Failure diagnosis and overclaim resistance	_____ _____	_____	_____
Transfer, residual uncertainty, and non-goals	_____ _____	_____	_____

Canonical QA gate

Validation	ACCEPTED_IMPORTABLE; 0 blockers; 0 warnings	Disposition	QA_ACCEPTED_ELIGIBLE
Blocker / note	No canonical-source blocker recorded.	Clearance receipt	_____

Media decision. Deck and video are NOT_APPLICABLE_WITH_RATIONALE; the embedded visuals, editable record, worksheet, and learner-authored reasoning are the assessed support.