

Component Hydration/Island Boundary Map v1

Components, React, Hydration, and Islands

Outcome. Classify a bounded interactive UI by component boundary, initial HTML source, and client activation boundary; explain whether hydration or an island model is actually present rather than assumed.

Evidence gate. Accept only a map that names initial HTML source and activation unit separately, preserves unknowns, and distinguishes hydration from client creation.

Component, Rendering, and Activation Boundaries

01 COMPONENT BOUNDARY Authority: Own structure, behavior, state, and a parent-facing interface Boundary: A general UI design unit; not inherently React or client-rendered	02 REACT LIBRARY Authority: Provide a concrete component-oriented UI programming model Boundary: One implementation choice; not the definition of component	03 INITIAL HTML Authority: Static generation, server rendering, or client creation Boundary: Rendering source must be observed separately from activation
04 ACTIVATION UNIT Authority: None, one root, or selected interactive regions Boundary: State exactly what receives client behavior	05 HYDRATION AGREEMENT Authority: Attach behavior to compatible server-rendered markup Boundary: Requires a matching render model and stable initial assumptions	06 ISLAND SELECTION Authority: Activate bounded regions while leaving other HTML static Boundary: Selective activation reduces scope; it does not erase coordination cost

Identity, decision, and claim boundary

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

Claim boundary. This is a conceptual decision lesson, not a coding lab. Use only scenario facts and declared sources; preserve uncertainty and learner-authored reasoning. No hydration or island claim is accepted without evidence for initial markup, activation unit, and client behavior.

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
concern	What does concern mean in this case?	Bounded scenario fact, source, or observable	Inference can be relabeled as observation
boundary_or_owner	What does boundary or owner mean in this case?	Bounded scenario fact, source, or observable	Inference can be relabeled as observation
observed_evidence	What was actually observed for observed evidence?	Scenario fact or direct observation with a locator	An inference is promoted to a fact
bounded_inference	Which facts support bounded inference?	Reasoning tied to an observation and explicit limit	Plausibility is treated as proof
decision	How is decision bounded and justified?	Allowed classification, reason, boundary, and reviewer	A page-wide label replaces row-level analysis
limitation_or_non_claim	What remains outside limitation or non claim?	Explicit unknown, constraint, or non-claim	Missing evidence is hidden or converted to confidence

Evidence and failure states

Evidence: OBSERVED / INFERRED / UNKNOWN. Decisions: ACCEPT / REVISE / DEFER. Failure layers: COMPONENT / LIBRARY / INITIAL_HTML / CLIENT_ACTIVATION / DATA_MATCH / UNKNOWN.

Component and Activation Boundary Record

English support projection from derived_text/tables/WEBF-006-DECISION-RECORD.template.json + content/en-US.md. This example demonstrates field relationships; it does not supply the learner's transfer or final decision evidence.

Field	Governed row 1	Governed row 2	Comparison question
concern	Article and pricing table	Quantity picker	Which boundary changed, and which evidence remains stable?
boundary_or_owner	Pre-rendered HTML / content region	Pre-rendered region activated as an Astro island	Which boundary changed, and which evidence remains stable?
observed_evidence	Delivered as readable HTML with no stated client behavior	The scenario states that the picker activates when visible	Which boundary changed, and which evidence remains stable?
bounded_inference	This region does not need client activation in the stated case	Client code is limited to this selected interactive region	Which boundary changed, and which evidence remains stable?
decision	Keep it outside hydrated or island activation boundaries	Use a visible-triggered island with a usable fallback state	Which boundary changed, and which evidence remains stable?
limitation_or_non_claim	Does not prove the whole page is static	Island architecture does not mean zero JavaScript	Which boundary changed, and which evidence remains stable?
Source-package validation	ACCEPTED_IMPORTABLE; 0 blockers; 0 warnings · QA_ACCEPTED_ELIGIBLE		

Complete Component Hydration/Island Boundary Map 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
concern			OBSERVED / INFERRED / UNKNOWN
boundary_or_owner			OBSERVED / INFERRED / UNKNOWN
observed_evidence			OBSERVED / INFERRED / UNKNOWN
bounded_inference			OBSERVED / INFERRED / UNKNOWN
decision			OBSERVED / INFERRED / UNKNOWN
limitation_or_non_claim			OBSERVED / INFERRED / UNKNOWN

Human closure

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

Bound concern → observe → classify → stress → decide

Analyze one responsibility at a time. A changed condition is a counterexample probe, not permission to invent implementation facts.

Case	Bounded concern or change	Provisional decision	Deciding evidence	Learner observation	Stable / unresolved boundary
STATIC ARTICLE	The article and pricing table have no client behavior	Readable HTML remains outside the activation surface	Rendered markup plus an explicit absence of required events/state	<div></div>	<div></div>
ASTRO ISLAND	The quantity picker activates only when visible	Activation is selective and local to the picker	Island directive/configuration and observed client activation boundary	<div></div>	<div></div>
HYDRATED ROOT	The account drawer has matching server markup and a client React tree	Hydration attaches behavior to that bounded root	Server markup, client entry, matching initial data, and runtime observation	<div></div>	<div></div>
CLIENT-CREATED	An analytics badge is created only in the Browser	It is client-rendered but not hydrated from server markup	Absence of matching initial markup plus client creation evidence	<div></div>	<div></div>

Reasoning sequence

Phase	Action	Required capture	Truth rule
Boundary	Mark each UI region and its owner.	Scenario fact, evidence locator, or explicit UNKNOWN	No hydration or island claim is accepted without evidence for initial markup, activation unit, and client behavior.
Boundary	Record where initial HTML comes from.	Scenario fact, evidence locator, or explicit UNKNOWN	No hydration or island claim is accepted without evidence for initial markup, activation unit, and client behavior.
Boundary	Record the activation unit as none, one root, or selected islands.	Scenario fact, evidence locator, or explicit UNKNOWN	No hydration or island claim is accepted without evidence for initial markup, activation unit, and client behavior.
Stress test	Separate server rendering from hydration.	Prediction, changed assumption, stable boundary, next evidence	A plausible counterexample does not become an observed implementation fact
Stress test	Test whether client-created markup has anything to hydrate.	Prediction, changed assumption, stable boundary, next evidence	A plausible counterexample does not become an observed implementation fact
Stress test	Name the smallest next observation that could revise the map.	Prediction, changed assumption, stable boundary, next evidence	A plausible counterexample does not become an observed implementation fact

Guardrail. Component, React, server rendering, hydration, and islands are related concepts, not synonyms.

Changed-context transfer

Compare a mostly static page with one interactive Astro island to a React root hydrating server-rendered HTML; classify the different activation boundaries.

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 / REVISE / 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.