

# Relatorio Tecnico Completo - Frontend

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Snapshot gerado em 2026-02-25 13:34:44 a partir de  
C:/Users/juan/Desktop/idkwhyyyy/frontend

## 1. Escopo e criterio de completude

Este documento consolida o estado atual do frontend sem omissões de arquivos do projeto na árvore funcional (source, testes e configuração), excluindo apenas artefatos gerados e dependências de terceiros (dist, node\_modules, reports de teste e .git).

Total de arquivos inventariados nesta versão: 36.

## 2. Validação executada no snapshot

Comandos executados no momento da geração do relatório:

```
yarn verify  
npx playwright test
```

Resultado observado: typecheck/lint ok e 9 testes E2E passados.

## 3. Stack, scripts e dependências

Camada	Tecnologia principal
Framework	React 19 + React Router DOM 7
Build	Vite 7 + plugin React + Tailwind CSS v4 plugin
Linguagem	TypeScript 5.9
State	Zustand + middleware persist
Flow editor	@xyflow/react
UI primitives	Radix UI via pacote radix-ui + wrappers locais
Styling	Tailwind CSS v4 + CSS custom em App.css/index.css
Teste E2E	Playwright
Lint	ESLint 9 + typescript-eslint + react-hooks

### 3.1 Scripts de package.json

Script	Comando
build	tsc -b && vite build
dev	vite
e2e	playwright test
e2e:headed	playwright test --headed
e2e:install	playwright install
e2e:ui	playwright test --ui

lint	<code>eslint . --max-warnings=0</code>
lint:fix	<code>eslint . --fix</code>
preview	<code>vite preview</code>
typecheck	<code>tsc -b --pretty false</code>
verify	<code>yarn typecheck &amp;&amp; yarn lint</code>

### 3.2 Dependencias runtime

Pacote	Versao
<code>@xyflow/react</code>	<code>^12.10.1</code>
<code>class-variance-authority</code>	<code>^0.7.1</code>
<code>clsx</code>	<code>^2.1.1</code>
<code>lucide</code>	<code>^0.575.0</code>
<code>lucide-react</code>	<code>^0.575.0</code>
<code>radix-ui</code>	<code>^1.4.3</code>
<code>react</code>	<code>^19.2.0</code>
<code>react-dom</code>	<code>^19.2.0</code>
<code>react-router-dom</code>	<code>^7.13.1</code>
<code>tailwind-merge</code>	<code>^3.5.0</code>
<code>zustand</code>	<code>^5.0.11</code>

### 3.3 Dependencias de desenvolvimento

Pacote	Versao
<code>@eslint/js</code>	<code>^9.39.1</code>
<code>@playwright/test</code>	<code>^1.58.2</code>
<code>@tailwindcss/vite</code>	<code>^4.2.1</code>
<code>@types/node</code>	<code>^24.10.1</code>
<code>@types/react</code>	<code>^19.2.7</code>
<code>@types/react-dom</code>	<code>^19.2.3</code>
<code>@vitejs/plugin-react</code>	<code>^5.1.1</code>
<code>eslint</code>	<code>^9.39.1</code>
<code>eslint-plugin-react-hooks</code>	<code>^7.0.1</code>
<code>eslint-plugin-react-refresh</code>	<code>^0.4.24</code>
<code>globals</code>	<code>^16.5.0</code>
<code>shadcn</code>	<code>^3.8.5</code>
<code>tailwindcss</code>	<code>^4.2.1</code>
<code>tw-animate-css</code>	<code>^1.4.0</code>
<code>typescript</code>	<code>~5.9.3</code>
<code>typescript-eslint</code>	<code>^8.48.0</code>
<code>vite</code>	<code>^7.3.1</code>

## 4. Inventario completo de arquivos

Arquivo	Categoria	Linhas	Bytes	Descricao
<code>.gitignore</code>	Project	26	284	Regras de exclusao para Git.

README.md	Meta	48	1710	Visao geral resumida, stack e comandos de desenvolvimento.
components.json	Config	23	462	Configuracao do shadcn/ui (aliases, estilo, css alvo).
e2e/canvas-empty-state.spec.ts	Test	25	980	Cenarios E2E de estado vazio e validacao de criacao.
e2e/canvas-lifecycle.spec.ts	Test	57	2342	Cenarios E2E de rename/delete e fallback de rota.
e2e/canvas-navigation.spec.ts	Test	36	1373	Cenarios E2E de navegacao entre canvases e rota invalida.
e2e/canvas-persistence.spec.ts	Test	19	715	Cenario E2E de persistencia apos reload.
e2e/helpers/canvas.ts	Test	46	1474	Helpers E2E reutilizaveis para fluxos de canvas.
eslint.config.js	Config	61	1559	Politica de linting para codigo de app e E2E.
index.html	Meta	12	302	Documento HTML base do Vite com mount point #root.
package.json	Project	51	1431	Dependencias, scripts e metadados do frontend.
playwright.config.ts	Config	35	833	Configuracao global da suite E2E com projetos browser.
src/App.css	Source	390	8648	Estilos de layout, toolbar, canvas, pattern, listas e

				nodes.
src/App.tsx	Source	8	121	Componente raiz de layout com Outlet do React Router.
src/AppRouter.tsx	Source	28	882	Declaracao de rotas e redirecionamento inicial.
src/components/nodes/ActionNode.tsx	Source	14	603	Node customizado do React Flow.
src/components/ui/button.tsx	Source	64	2392	Componente Button baseado em CVA + Radix Slot.
src/components/ui/dialog.tsx	Source	125	3191	Primitivas Dialog com wrappers e estilos.
src/components/ui/popover.tsx	Source	87	2343	Primitivas Popover com wrappers e estilos.
src/features/flow/components/CanvasMartialPattern.tsx	Source	56	1552	Pattern decorativo responsivo com icones.
src/features/flow/components/FlowToolbar.tsx	Source	265	8719	Toolbar de canvases/nodes e acoes CRUD.
src/features/flow/components/FlowWorkspace.tsx	Source	72	2096	Componente de composicao de workspace e navegacao.
src/features/flow/domain/flow.factory.ts	Source	100	2269	Factories de IDs, grafo inicial, nodes e edges.
src/features/flow/domain/flow.types.ts	Source	23	447	Tipos de dominio do editor de fluxo.
src/features/flow/pages/CanvasHomePag	Source	139	4235	Tela inicial sem canvas com dialog de

e.tsx				criacao.
src/features/flow/pages/CanvasPage.tsx	Source	109	3218	Tela do editor React Flow para canvas ativo.
src/features/flow/persistence/flowPersistencePolicy.ts	Source	24	539	Politica de persistencia guest-local vs authenticated-api.
src/features/flow/store/useFlowStore.ts	Source	208	6108	Store Zustand com estado, regras e mutacoes.
src/index.css	Source	194	7859	Design tokens, tema light/dark e base layer Tailwind.
src/lib/utils.ts	Source	6	166	Helper cn() para merge de classes.
src/main.tsx	Source	13	340	Bootstrap React, StrictMode e BrowserRouter.
tsconfig.app.json	Config	32	799	Configuracao TypeScript para app React.
tsconfig.json	Config	13	213	Projeto raiz TypeScript com references.
tsconfig.node.json	Config	30	720	Configuracao TypeScript para arquivos de Node/Vite.
vite.config.ts	Config	14	332	Configuracao Vite, plugins e aliases.
yarn.lock	Project	4699	230611	Lockfile de dependencias do Yarn.

## 5. Arquitetura de execucao e roteamento

Fluxo de inicializacao:

index.html -> src/main.tsx -> BrowserRouter -> AppRouter -> App(Outlet) -> paginas

Rotas efetivas:

Rota	Componente	Regra
/	RootRedirect	Redireciona para /canvas ou /canvas/:id
/canvas	CanvasHomePage	Tela de empty state + criação do primeiro canvas
/canvas/:canvasId	CanvasPage	Editor React Flow do canvas ativo
*	RootRedirect	Fallback para a regra de root

Regras de redirecionamento em runtime:

- CanvasHomePage redireciona automaticamente para o primeiro canvas existente.
- CanvasPage redireciona para /canvas quando não existe nenhum canvas.
- CanvasPage redireciona para o primeiro canvas válido quando canvasId da URL não existe.

## 6. Domínio e estado (flow)

### 6.1 Tipos de domínio

Tipo	Campos
ActionNodeData	title: string, subtitle: string
ActionFlowNode	Node<ActionNodeData, 'action'>
FlowEdge	Edge (@xyflow/react)
FlowGraph	nodes: ActionFlowNode[], edges: FlowEdge[]
FlowCanvas	id, name, graph, nextNodeIndex
FlowCanvasSummary	Pick<FlowCanvas, 'id'   'name'>

### 6.2 Factories

Arquivo: src/features/flow/domain/flow.factory.ts

- createInitialFlow(): retorna cópia do fluxo inicial de 3 nodes e 2 edges.
- createCanvasId(): gera id no formato canvas-xxxxxxxx (UUID truncado).
- createCanvasModel({id, name}): cria canvas com graph inicial e nextNodeIndex.
- createActionNode(nodeIndex): cria node step-N com posição em grade.
- createLinkedEdge(source, target): cria edge animada entre nodes.

Constantes funcionais importantes:

- GRID\_LAYOUT: columns=3, startX=80, startY=280, stepX=300, stepY=150.
- INITIAL\_FLOW: nodes start/validate/done + edges start-validate/validate-done.

## 6.3 Store Zustand

Arquivo: src/features/flow/store/useFlowStore.ts

Acao	Assinatura	Comportamento resumido
hasCanvas	(canvasId) => boolean	Verifica existencia por id
createCanvas	(name) => string	Cria canvas com fallback de nome e retorna id
renameCanvas	(canvasId, nextName) => void	Aplica trim e preserva nome antigo se vazio
deleteCanvas	(canvasId, activeCanvasId) => string   null	Remove canvas e calcula fallback de rota ativa
addActionNodeToCanvas	(canvasId) => void	Adiciona node e edge linkando ultimo node existente
connectNodesByCanvas	(canvasId, connection) => void	Adiciona edge manual se source/target validos
handleNodesChangeByCanvas	(canvasId, changes) => void	Aplica batch de NodeChange
handleEdgesChangeByCanvas	(canvasId, changes) => void	Aplica batch de EdgeChange

## 6.4 Persistencia

Item	Valor atual
FLOW_PERSIST_STORAGE_KEY	flow-canvases-v1
Modos suportados	guest-local   authenticated-api
Modo atual resolvido	guest-local (auth snapshot atual retorna false)
Storage usado em guest-local	localStorage via createJSONStorage
Storage usado em authenticated-api	noopStorage (placeholder)
Partialize persist	Somente state.canvases
Version	1

TODO ativo identificado no codigo:

src/features/flow/persistence/flowPersistencePolicy.ts: TODO(auth) substituir leitura mock de autenticacao.

## 7. Componentes e paginas

Arquivo	Export principal	Responsabilidade
src/components/nodes/ActionNode.tsx	ActionNode	Render node com handles left/right
src/components/ui/button.button.tsx	Button, buttonVariants	Botao com CVA (variant/size)
src/components/ui/popover.popover.tsx	Popover*	Wrappers de popover com header/title/description
src/components/ui/dialog.dialog.tsx	Dialog*	Wrappers de dialog (overlay/content/footer/etc)

src/features/flow/components/FlowToolbar.tsx	FlowToolbar	CRUD de canvases e acao de add node
src/features/flow/components/FlowWorkspace.tsx	FlowWorkspace	Integracao store+toolbar+navegacao
src/features/flow/components/CanvasMartialPattern.tsx	CanvasMartialPattern	Pattern visual responsivo
src/features/flow/pages/CanvasHomePage.tsx	CanvasHomePage	Empty state e criacao do primeiro canvas
src/features/flow/pages/CanvasPage.tsx	CanvasPage	Tela principal do editor ReactFlow

## 7.1 Catalogo de data-testid

Escopo	data-testid
Home	home-create-first-canvas
Home	home-create-canvas-input
Home	home-create-canvas-submit
Toolbar	canvas-open-popover
Toolbar	canvas-create-input
Toolbar	canvas-create-submit
Toolbar dinamico	canvas-item-\${canvas.id}
Toolbar dinamico	canvas-open-\${canvas.id}
Toolbar dinamico	canvas-edit-\${canvas.id}
Toolbar dinamico	canvas-delete-\${canvas.id}
Toolbar dinamico	canvas-rename-input-\${canvas.id}
Toolbar dinamico	canvas-rename-confirm-\${canvas.id}
Toolbar dinamico	canvas-rename-cancel-\${canvas.id}

## 8. Design system e estilos

Arquivo base de tokens: src/index.css

Arquivo de layout e componentes visuais: src/App.css

### 8.1 Variaveis CSS do bloco :root (light)

Variavel	Valor
background	oklch(0.9641 0.0052 158.6031)
foreground	oklch(0.2836 0.0272 156.4301)
card	oklch(0.9424 0.0083 158.5279)
card-foreground	oklch(0.2253 0.0193 156.7013)
popover	oklch(0.9424 0.0083 158.5279)
popover-foreground	oklch(0.2253 0.0193 156.7013)
primary	oklch(0.5313 0.1014 153.3713)
primary-foreground	oklch(0.9854 0.0014 158.688)
secondary	oklch(0.5852 0.0854 61.1363)

secondary-foreground	oklch(0.985 0.0009 64.0793)
muted	oklch(0.9115 0.0084 158.5197)
muted-foreground	oklch(0.4858 0.0418 156.692)
accent	oklch(0.889 0.0105 158.4615)
accent-foreground	oklch(0.2836 0.0272 156.4301)
destructive	oklch(0.5107 0.1226 22.3963)
destructive-foreground	oklch(0.9848 0 0)
border	oklch(0.8513 0.0142 158.3553)
input	oklch(0.9263 0.0069 158.5564)
ring	oklch(0.5313 0.1014 153.3713)
chart-1	oklch(0.5313 0.1014 153.3713)
chart-2	oklch(0.5852 0.0854 61.1363)
chart-3	oklch(0.5107 0.1226 22.3963)
chart-4	oklch(0.5907 0.0672 155.9315)
chart-5	oklch(0.7038 0.0439 157.2884)
sidebar	oklch(0.9278 0.0104 158.475)
sidebar-foreground	oklch(0.3391 0.0346 156.2653)
sidebar-primary	oklch(0.5313 0.1014 153.3713)
sidebar-primary-foreground	oklch(0.9854 0.0014 158.688)
sidebar-accent	oklch(0.889 0.0105 158.4615)
sidebar-accent-foreground	oklch(0.2836 0.0272 156.4301)
sidebar-border	oklch(0.8513 0.0142 158.3553)
sidebar-ring	oklch(0.5313 0.1014 153.3713)
font-sans	ui-monospace, 'JetBrains Mono', 'Fira Code', 'Menlo', monospace
font-serif	Georgia, serif
font-mono	ui-monospace, 'JetBrains Mono', 'Fira Code', 'Menlo', monospace
radius	Orem
shadow-x	2px
shadow-y	2px
shadow-blur	0px
shadow-spread	0px
shadow-opacity	0.1
shadow-color	hsl(142, 20%, 15%)
shadow-2xs	2px 2px 0px 0px hsl(142 20% 15% / 0.05)
shadow-xs	2px 2px 0px 0px hsl(142 20% 15% / 0.05)
shadow-sm	2px 2px 0px 0px hsl(142 20% 15% / 0.1), 2px 1px 2px -1px hsl(142 20% 15% / 0.1)
shadow	2px 2px 0px 0px hsl(142 20% 15% / 0.1), 2px 1px 2px -1px hsl(142 20% 15% / 0.1)
shadow-md	2px 2px 0px 0px hsl(142 20% 15% / 0.1), 2px 2px 4px -1px hsl(142 20% 15% / 0.1)
shadow-lg	2px 2px 0px 0px hsl(142 20% 15% / 0.1), 2px 4px 6px -1px hsl(142 20% 15% / 0.1)
shadow-xl	2px 2px 0px 0px hsl(142 20% 15% / 0.1), 2px

	8px 10px -1px hsl(142 20% 15% / 0.1)
shadow-2xl	2px 2px 0px 0px hsl(142 20% 15% / 0.25)
tracking-normal	-0.01em
spacing	0.25rem

## 8.2 Variaveis CSS do bloco .dark

Variavel	Valor
background	oklch(0.9641 0.0052 158.6031)
foreground	oklch(0.2836 0.0272 156.4301)
card	oklch(0.9424 0.0083 158.5279)
card-foreground	oklch(0.2253 0.0193 156.7013)
popover	oklch(0.9424 0.0083 158.5279)
popover-foreground	oklch(0.2253 0.0193 156.7013)
primary	oklch(0.5313 0.1014 153.3713)
primary-foreground	oklch(0.9854 0.0014 158.688)
secondary	oklch(0.5852 0.0854 61.1363)
secondary-foreground	oklch(0.985 0.0009 64.0793)
muted	oklch(0.9115 0.0084 158.5197)
muted-foreground	oklch(0.4858 0.0418 156.692)
accent	oklch(0.889 0.0105 158.4615)
accent-foreground	oklch(0.2836 0.0272 156.4301)
destructive	oklch(0.5107 0.1226 22.3963)
destructive-foreground	oklch(0.9848 0 0)
border	oklch(0.8513 0.0142 158.3553)
input	oklch(0.9263 0.0069 158.5564)
ring	oklch(0.5313 0.1014 153.3713)
chart-1	oklch(0.5313 0.1014 153.3713)
chart-2	oklch(0.5852 0.0854 61.1363)
chart-3	oklch(0.5107 0.1226 22.3963)
chart-4	oklch(0.5907 0.0672 155.9315)
chart-5	oklch(0.7038 0.0439 157.2884)
sidebar	oklch(0.9278 0.0104 158.475)
sidebar-foreground	oklch(0.3391 0.0346 156.2653)
sidebar-primary	oklch(0.5313 0.1014 153.3713)
sidebar-primary-foreground	oklch(0.9854 0.0014 158.688)
sidebar-accent	oklch(0.889 0.0105 158.4615)
sidebar-accent-foreground	oklch(0.2836 0.0272 156.4301)
sidebar-border	oklch(0.8513 0.0142 158.3553)
sidebar-ring	oklch(0.5313 0.1014 153.3713)
font-sans	ui-monospace, 'JetBrains Mono', 'Fira Code', 'Menlo', monospace
font-serif	Georgia, serif
font-mono	ui-monospace, 'JetBrains Mono', 'Fira Code', 'Menlo', monospace
radius	Orem
shadow-x	2px

shadow-y	2px
shadow-blur	0px
shadow-spread	0px
shadow-opacity	0.1
shadow-color	hsl(142, 20%, 15%)
shadow-2xs	2px 2px 0px 0px hsl(142 20% 15% / 0.05)
shadow-xs	2px 2px 0px 0px hsl(142 20% 15% / 0.05)
shadow-sm	2px 2px 0px 0px hsl(142 20% 15% / 0.1), 2px 1px 2px -1px hsl(142 20% 15% / 0.1)
shadow	2px 2px 0px 0px hsl(142 20% 15% / 0.1), 2px 1px 2px -1px hsl(142 20% 15% / 0.1)
shadow-md	2px 2px 0px 0px hsl(142 20% 15% / 0.1), 2px 2px 4px -1px hsl(142 20% 15% / 0.1)
shadow-lg	2px 2px 0px 0px hsl(142 20% 15% / 0.1), 2px 4px 6px -1px hsl(142 20% 15% / 0.1)
shadow-xl	2px 2px 0px 0px hsl(142 20% 15% / 0.1), 2px 8px 10px -1px hsl(142 20% 15% / 0.1)
shadow-2xl	2px 2px 0px 0px hsl(142 20% 15% / 0.25)
tracking-normal	-0.01em
spacing	0.25rem

### 8.3 Variaveis mapeadas em @theme inline

Variavel	Valor
color-background	var(--background)
color-foreground	var(--foreground)
color-card	var(--card)
color-card-foreground	var(--card-foreground)
color-popover	var(--popover)
color-popover-foreground	var(--popover-foreground)
color-primary	var(--primary)
color-primary-foreground	var(--primary-foreground)
color-secondary	var(--secondary)
color-secondary-foreground	var(--secondary-foreground)
color-muted	var(--muted)
color-muted-foreground	var(--muted-foreground)
color-accent	var(--accent)
color-accent-foreground	var(--accent-foreground)
color-destructive	var(--destructive)
color-destructive-foreground	var(--destructive-foreground)
color-border	var(--border)
color-input	var(--input)
color-ring	var(--ring)
color-chart-1	var(--chart-1)
color-chart-2	var(--chart-2)
color-chart-3	var(--chart-3)
color-chart-4	var(--chart-4)

color-chart-5	var(--chart-5)
color-sidebar	var(--sidebar)
color-sidebar-foreground	var(--sidebar-foreground)
color-sidebar-primary	var(--sidebar-primary)
color-sidebar-primary-foreground	var(--sidebar-primary-foreground)
color-sidebar-accent	var(--sidebar-accent)
color-sidebar-accent-foreground	var(--sidebar-accent-foreground)
color-sidebar-border	var(--sidebar-border)
color-sidebar-ring	var(--sidebar-ring)
font-sans	var(--font-sans)
font-mono	var(--font-mono)
font-serif	var(--font-serif)
radius-sm	calc(var(--radius) - 4px)
radius-md	calc(var(--radius) - 2px)
radius-lg	var(--radius)
radius-xl	calc(var(--radius) + 4px)
shadow-2xs	var(--shadow-2xs)
shadow-xs	var(--shadow-xs)
shadow-sm	var(--shadow-sm)
shadow	var(--shadow)
shadow-md	var(--shadow-md)
shadow-lg	var(--shadow-lg)
shadow-xl	var(--shadow-xl)
shadow-2xl	var(--shadow-2xl)
tracking-tighter	calc(var(--tracking-normal) - 0.05em)
tracking-tight	calc(var(--tracking-normal) - 0.025em)
tracking-normal	var(--tracking-normal)
tracking-wide	calc(var(--tracking-normal) + 0.025em)
tracking-wider	calc(var(--tracking-normal) + 0.05em)
tracking-widest	calc(var(--tracking-normal) + 0.1em)

#### 8.4 Seletores presentes em App.css

#	Selector
1	.app-shell
2	.canvas-wrapper
3	.canvas-empty-state
4	.canvas-empty-state__title
5	.canvas-empty-state__description
6	.canvas-home-surface
7	.canvas-home-surface::before
8	.canvas-empty-state--home
9	.canvas-toolbar
10	.flow-canvas
11	.flow-canvas .react-flow__background-pattern
12	.canvas-pattern

13	.canvas-pattern::after
14	.canvas-pattern__cell
15	.canvas-pattern__icon
16	.canvas-pattern__cell--0
17	.canvas-pattern__cell--1
18	.canvas-pattern__cell--2
19	.canvas-pattern__cell--3
20	.canvas-pattern__cell--4
21	.flow-canvas .react-flow__panel
22	.flow-canvas .react-flow__controls
23	.flow-canvas .react-flow__controls-button svg
24	.flow-canvas .react-flow__minimap
25	.flow-canvas .react-flow__edge-text
26	.flow-canvas .react-flow__edge.updating .react-flow__edge-path
27	.canvas-create
28	.canvas-input
29	.canvas-input:focus-visible
30	.canvas-input--inline
31	.canvas-list
32	.canvas-list-item
33	.canvas-list-item--active
34	.canvas-list-main
35	.canvas-list-link
36	.canvas-list-link:focus-visible
37	.canvas-list-name
38	.canvas-list-link:hover
39	.canvas-list-active-label
40	.canvas-list-actions
41	.action-node
42	.action-node__title
43	.action-node__subtitle
44	.action-node--selected
45	.action-node .react-flow__handle
46	.app-shell
47	.canvas-toolbar

Total de seletores encontrados em App.css: 47 (com repetição quando declarado novamente em media query).

## 9. Testes E2E completos

### 9.1 Projetos de browser

Projeto	Filtro	Device
chromium	Sem filtro (suite completa)	Desktop Chrome
firefox-smoke	grep /@smoke/	Desktop Firefox

webkit-smoke	grep /@smoke/	Desktop Safari
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## 9.2 Cenarios por arquivo spec

Arquivo spec	Cenario
canvas-empty-state.spec.ts	shows empty state and validates create button before first canvas @smoke
canvas-lifecycle.spec.ts	renames and deletes active canvas with route fallback
canvas-lifecycle.spec.ts	cancels canvas rename with Escape without persisting changes
canvas-lifecycle.spec.ts	deletes the last canvas and falls back to empty route
canvas-navigation.spec.ts	creates canvas and navigates between canvases
canvas-navigation.spec.ts	redirects invalid canvas route to first available canvas
canvas-persistence.spec.ts	persists canvases after page reload for guest user

## 9.3 Helpers de teste

Arquivo	Funcao	Uso
e2e/helpers/canvas.ts	gotoCanvasRoot(page)	Navega para root e valida rota /canvas(/{id})
e2e/helpers/canvas.ts	openCanvasPopover(page)	Abre popover e garante input de criacao visivel
e2e/helpers/canvas.ts	openFirstCanvasDialog(page)	Abre dialog inicial de primeiro canvas
e2e/helpers/canvas.ts	createCanvas(page, name)	Cria canvas em home ou toolbar e retorna id da URL

## 10. Catalogo de exports por arquivo

### e2e/helpers/canvas.ts

- export async function gotoCanvasRoot(page: Page) {
- export async function openCanvasPopover(page: Page) {
- export async function openFirstCanvasDialog(page: Page) {
- export async function createCanvas(page: Page, canvasName: string) {

### eslint.config.js

- export default defineConfig([

### **playwright.config.ts**

- export default defineConfig({

### **src/App.tsx**

- export default App

### **src/AppRouter.tsx**

- export function AppRouter() {

### **src/components/nodes/ActionNode.tsx**

- export function ActionNode({ data, selected }: NodeProps<ActionFlowNode>) {

### **src/components/ui/button.tsx**

- export { Button, buttonVariants }

### **src/components/ui/dialog.tsx**

- export {

### **src/components/ui/popover.tsx**

- export {

### **src/features/flow/components/CanvasMartialPattern.tsx**

- export function CanvasMartialPattern() {

### **src/features/flow/components/FlowToolbar.tsx**

- export function FlowToolbar({

### **src/features/flow/components/FlowWorkspace.tsx**

- export function FlowWorkspace({

### **src/features/flow/domain/flow.factory.ts**

- export function createInitialFlow(): FlowGraph {

- export function createCanvasId() {

- export function createCanvasModel(input: { id: string; name: string }): FlowCanvas {

- export function createActionNode(nodeIndex: number): ActionFlowNode {

- export function createLinkedEdge(sourceId: string, targetId: string): FlowEdge {

### **src/features/flow/domain/flow.types.ts**

- export type ActionNodeData = {

- export type ActionFlowNode = Node<ActionNodeData, 'action'>

- export type FlowEdge = Edge
- export type FlowGraph = {
- export type FlowCanvas = {
- export type FlowCanvasSummary = Pick<FlowCanvas, 'id' | 'name'>

### **src/features/flow/pages/CanvasHomePage.tsx**

- export function CanvasHomePage() {

### **src/features/flow/pages/CanvasPage.tsx**

- export function CanvasPage() {

### **src/features/flow/persistence/flowPersistencePolicy.ts**

- export type PersistenceMode = 'guest-local' | 'authenticated-api'
- export const FLOW\_PERSIST\_STORAGE\_KEY = 'flow-canvases-v1'
- export function resolvePersistenceMode(): PersistenceMode {

### **src/features/flow/store/useFlowStore.ts**

- export const useFlowStore = create<FlowState>()

### **src/lib/utils.ts**

- export function cn(...inputs: ClassValue[]) {

### **vite.config.ts**

- export default defineConfig({

## **11. Mapeamento para API backend**

Operacao frontend	Endpoint sugerido	Payload minimo
createCanvas(name)	POST /canvases	{ name }
renameCanvas(canvasId, name)	PATCH /canvases/:id	{ name }
deleteCanvas(canvasId)	DELETE /canvases/:id	-
addActionNodeToCanvas(canvasId)	POST /canvases/:id/nodes	{ } ou defaults server-side
connectNodesByCanvas(canvasId, connection)	POST /canvases/:id/edges	{ source, target }
handleNodesChangeByCanvas(canvasId, changes)	PATCH /canvases/:id/nodes	{ changes: [...] }
handleEdgesChangeByCanvas(canvasId, changes)	PATCH /canvases/:id/edges	{ changes: [...] }
Listar canvases	GET /canvases	-

Carregar canvas por id	GET /canvases/:id	-
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Observacao operacional: mudancas de posicao de node podem ocorrer em alta frequencia.

Considerar debounce no cliente e/ou batch no backend.

## 12. Observacoes finais

Este relatorio foi gerado com base direta no codigo-fonte atual, com inventario completo de arquivos funcionais e configuracoes do frontend.

Nao foi realizada renderizacao visual automatica do DOCX nesta maquina por ausencia de soffice/pdftoppm.