SYMBEEO

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DESIGN STUDY

Staff and volunteer portal for a public stadium authority: 2,400 event-day workers, zero WCAG 2.2 AA failures before the ADA Title II date

Complete design on current platforms

CAPABILITY	INDUSTRY	SETTING
Digital	Sports & Entertainment	Stadium authority
DOCUMENT	VERSION	DATE
DIG-007	1.0	Oct 22, 2026

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Document control

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Sign-off	"An engagement under this design is signed by the practice lead before any build proceeds."		

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CONVENTIONS

Source tags. [S] figure read from the standard owner's, regulator's, project's or vendor's own current page on Oct 22, 2026, or carried from a Symbeeo document that read it, where the text names that document · [S*] figure from a page summary where the owner's own page could not be opened · [A] design assumption · [T] design target (the record's outcome figure and anything derived from it). Every figure carries one tag. No figure comes from any prior engagement, file or asset. A row with more than one tag is counted once: as a published figure if any tag is [S] or [S*], otherwise as an assumption if any tag is [A], otherwise as a design target.

Table 1. Revision history

Date	Version	Change
Oct 22, 2026	1.0	First issue.

1 · Scope

Who it is for. The chief information officer of a stadium authority owned by its county and city, whose ushers, ticket takers and volunteers pick shifts, finish training and read their event-day orders on their own phones, through four systems from three vendors — and who has to show that every one of those screens works for a worker who uses a screen reader, a switch or a magnifier before the ADA Title II web rule's date arrives.

Typical buyer [A]. A stadium authority created by its county and city, owning a 64,000-seat stadium: one professional football tenant, a college bowl game, concerts and events — 26 event days a year. The event-day workforce is 2,400 people: 380 authority employees, 1,250 part-time event staff and 770 volunteers from community groups. About 70 % use their own phones. Four surfaces carry their work: the authority's own portal (sign-up, assignments, maps, event-day orders) and three SaaS products — workforce scheduling, learning management for the mandatory crowd-management training, and payroll self-service for part-time staff.

What is in. The accessibility target and the release gate that holds it; sign-in; joiner, mover and season-end changes across the four surfaces; vendor conformance evidence and the contract terms behind it; the audit before the season.
What is out. The public ticketing and fan website (the football tenant's); the scoreboard and in-bowl displays; physical accessibility of the building; the content of the training.

Assumptions. The authority is a public entity under ADA Title II, and its counsel confirms which compliance date applies (R3) [A]. Employees and part-time staff sign in with Microsoft Entra ID; volunteers with Microsoft Entra External ID [A]. Each SaaS vendor accepts an accessibility clause at renewal [A].

Related documents, read Oct 22, 2026. SRA-DIG-001, SDD-DIG-001, STP-DIG-001 (R14, R15, R17 there; the ADA Title II row of §9.1) · WCAG 2.2, W3C Recommendation (`https://www.w3.org/TR/WCAG22/`) · What's new in WCAG 2.2 (`https://www.w3.org/WAI/standards-guidelines/wcag/new-in-22/`) · Federal Register, DOJ interim final rule on Title II web and mobile app compliance dates, public inspection copy (`https://public-inspection.federalregister.gov/2026-07663.pdf`) · axe-core on npm (`https://www.npmjs.com/package/axe-core`) and its rule list (`https://github.com/dequelabs/axe-core/blob/develop/doc/rule-descriptions.md`) · @axe-core/playwright (`https://www.npmjs.com/package/@axe-core/playwright`) · NVDA releases (`https://github.com/nvaccess/nvda/releases`) · ITI, VPAT 2.5Rev (`https://www.itic.org/policy/accessibility/vpat`).

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1c · Public implementations this design follows

Each row is labeled. **Public deployment**: a named operator's real deployment, published and dated by the operator, its vendor or a partner, used where one exists. **Our own design**: the dated vendor or standards documentation this design was built from, where no public deployment of the design exists. Labels and dates checked Oct 22, 2026.

Table 2. Public implementations this design follows

Implementation	Who published it · date	What it settles for this design	URL
Our own design, built from published documentation. Interim final rule: compliance with the Title II web and mobile app rule moved to Apr 26, 2027 for public entities of 50,000 or more, and to Apr 26, 2028 for smaller entities and special district governments; the technical standard, WCAG 2.1 AA, unchanged	US Department of Justice · Federal Register, published Apr 20, 2026 [S*] dates as summarized by the UNC School of Government	R2 and R3: the legal floor is 2.1 AA; which date binds a stadium authority depends on how its enabling act constitutes it, so counsel decides and the design meets the earlier date anyway	`https://public-inspection.federalregister.gov/2026-07663.pdf`
Our own design, built from published documentation. WCAG 2.2: nine new success criteria, six of them at Level A or AA — 2.4.11 Focus Not Obscured (Minimum), 2.5.7 Dragging Movements, 2.5.8 Target Size (Minimum), 3.2.6 Consistent Help, 3.3.7 Redundant Entry, 3.3.8 Accessible Authentication (Minimum); 4.1.1 Parsing removed	W3C · Recommendation, Oct 5, 2023; updated Dec 12, 2024	R4 and R5: 2.2 AA meets 2.1 AA and adds the six criteria a phone-first shift portal is most likely to fail	`https://www.w3.org/TR/WCAG22/`
Our own design, built from published documentation. axe-core 4.14.0: of the six new A and AA criteria, one — target-size, 2.5.8 — has a rule, reporting "failure, needs review"	Deque Systems, open-source project · released Oct 5, 2026	R6 and §4.3: automation catches one of the six; the other five are tested by people, and the release gate says so	`https://github.com/dequelabs/axe-core/blob/develop/doc/rule-descriptions.md`

No public, dated accessibility program for a stadium authority's staff and volunteer systems was found on Oct 22, 2026; every row is documentation used to build our own design.

2 · Requirements register

Table 3. Requirements register

#	Requirement	Value	Source
R1	Estate	2,400 workers (380 employees, 1,250 part-time staff, 770 volunteers) · 26 event days · 4 surfaces from 1 owner and 3 vendors	[A]
R2	Legal floor	WCAG 2.1 Level AA for a public entity's web content and mobile apps	[S] 28 CFR Part 35 Subpart H, via SRA-DIG-001 §9.1

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#	Requirement	Value	Source
R3	Compliance date	Apr 26, 2027, or Apr 26, 2028 for special district governments and entities under 50,000; counsel confirms which	[S*] DOJ interim final rule; [A]
R4	Accessibility target	0 WCAG 2.2 Level A or AA failures on all 4 surfaces at audit, before the first event day of the 2027 season	[T] SRA-DIG-001 R17
R5	Criteria tested by hand on every release	the six new 2.2 criteria at A or AA: 2.4.11, 2.5.7, 2.5.8, 3.2.6, 3.3.7, 3.3.8	[S] W3C WCAG 2.2
R6	Automated check	axe-core 4.14.0 through @axe-core/playwright 4.14.0 on every portal template; 2.5.8 is the only 2.2 criterion with a rule	[S] npm; axe-core rule list
R7	Release gate	any serious or critical axe violation, or any failed manual check on R5, blocks the release	[T]
R8	Manual test matrix	NVDA 2026.2 with Firefox and Chrome; JAWS with Chrome; VoiceOver on iOS with Safari; TalkBack on Android with Chrome	[S] NVDA release Aug 31, 2026; [A] matrix
R9	Vendor evidence	an Accessibility Conformance Report on VPAT 2.5Rev, WCAG edition, at most 12 months old, for each SaaS	[S] VPAT 2.5Rev via SRA-DIG-001 §9.1; [A] age
R10	Sign-in	3.3.8 met: passkey or an emailed one-time link; no puzzle, transcription or memory test; paste allowed	[S] W3C 3.3.8; [A] method
R11	Reflow	every screen usable at 320 CSS px width without horizontal scrolling	[S] W3C 1.4.10
R12	Role change on every surface	joiner and mover change reaches all 4 surfaces over SCIM 2.0 ≤ 15 min	[T] SRA-DIG-001 R14
R13	Season end	part-time and volunteer accounts disabled 30 days after the last event day; re-enabled on re-signup	[A]
R14	Defect after go-live	an accessibility defect on R5 or R11 fixed ≤ 10 working days; one that blocks sign-in or shift sign-up ≤ 2 days	[T]

Fourteen rows; eight carry a regulator's, standard owner's, project's or vendor's figure (four of them beside an assumption), two are design assumptions, four are design targets.

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3 · Architecture overview

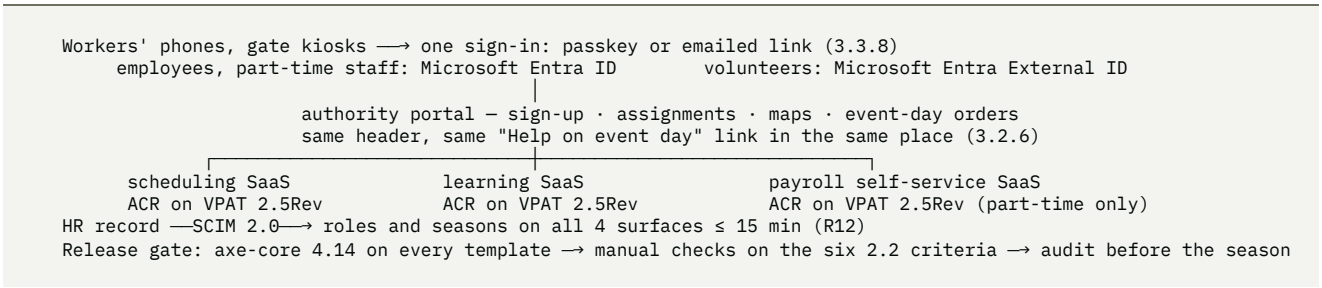


Figure 1. Four surfaces, one sign-in, one gate

A worker meets three vendors' screens in one shift; the authority answers for all of them. The portal is held to the gate on every release; the vendors are held to the same target by contract and by the authority's own audit of their screens.

Table 4. Architecture overview

Role	Component (exact name)	Qty	Capacity used	Why this unit
Accessibility measure	WCAG 2.2 Level AA	4 surfaces	2,400 workers	meets the rule's 2.1 AA floor and adds the six phone-first criteria [S]
Automated check	axe-core 4.14.0 via @axe-core/playwright 4.14.0	1 CI stage	every portal template, every release [A]	target-size rule for 2.5.8 [S]; catches nothing on the other five
Manual check	NVDA 2026.2, JAWS, VoiceOver, TalkBack	4 pairings	the six criteria on every release; full audit before the season [A]	the readers the workforce's own phones and PCs run [A]
Workforce sign-in	Microsoft Entra ID	1 tenant	1,630 employees and part-time staff [A]	existing; SCIM 2.0 provisioning to the SaaS [A]
Volunteer sign-in	Microsoft Entra External ID	1 tenant	770 volunteers [A]	volunteers stay out of the workforce directory [A]

4 · Design by subsystem

4.1 One target for four surfaces.

The rule's floor is WCAG 2.1 AA (R2) [S]; the design target is 2.2 AA with zero failures (R4) [T], because 2.2 AA meets 2.1 AA [S] and adds the criteria a phone-first shift portal fails first. The target binds the vendors' screens as much as the authority's own: a worker does not know which company drew the page, and the authority treats content it provides through a vendor as its own [A]. The audit date is the first event day of the 2027 season, ahead of either compliance date (R3) [T].

4.2 The six criteria, where this portal meets them.

2.5.7: the scheduling calendar lets a worker drag a shift to swap it; every drag has a tap-to-select-then-tap-to-place alternative [A]. 2.5.8: shift cells and map pins are at least 24 by 24 CSS pixels or spaced to that size [S] criterion; [A] sizes. 2.4.11: the sticky event-day banner is not allowed to cover the focused element; the portal reserves scroll padding the banner's height [A]. 3.2.6: the "Help on event day" link sits in the same place on all four surfaces, set in each vendor's configuration [A]. 3.3.7: an emergency contact and a training certificate number are entered once and carried, not asked again on the next surface [A]. 3.3.8: R10 below. Rejected: auditing to 2.1 AA only — it passes a portal that a switch user cannot swap a shift on.

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4.3 Release gate.

axe-core 4.14.0 runs through @axe-core/playwright on every portal template in CI (R6) [S]; a serious or critical violation blocks the release (R7) [T]. Automation reaches one of the six new criteria — target size — and reports it as "failure, needs review" [S], so each release also carries a manual pass of the six criteria on the four reader pairings of R8 [A]. The full audit before the season adds reflow at 320 CSS px (R11) [S] and the rest of WCAG 2.2 AA.

4.4 Vendors.

Each SaaS supplies an Accessibility Conformance Report on VPAT 2.5Rev, WCAG edition, no older than 12 months (R9) [S]; [A]. A report is evidence of the vendor's claim, not of conformance: the authority audits the screens its workers use on the same matrix [A]. At renewal, each contract gains a clause: WCAG 2.2 AA on the screens the authority's workers use, and the R14 repair times on defects the authority reports [A]. Rejected: accepting the report alone — it is written by the party being assessed.

4.5 Sign-in.

Passkeys for those who register one; an emailed one-time link for everyone else; paste allowed into every code field; no CAPTCHA, puzzle or memorized-character test (R10) [S] criterion; [A] methods. Volunteers sign in through Entra External ID so they never hold a workforce account [A]. Rejected: SMS codes as the only method — 3.3.8 accepts a code only where it can be pasted or filled in by the device [S], and a code sent to a volunteer group's shared phone does not reach the worker at the gate [A].

4.6 Seasons, not careers.

Joiners and movers reach all four surfaces over SCIM 2.0 within 15 minutes (R12) [T]. Part-time and volunteer accounts are disabled 30 days after the last event day and re-enabled when the worker signs up for the next season (R13) [A]; employees leave under the authority's normal leaver process, SRA-DIG-001 R15 [S].

5 · Failure behavior

Table 5. Failure behavior

Failure	Behavior	Source
axe finds a serious violation	release blocked; defect raised against the template	[T] R7
Manual check fails on one of the six criteria	release blocked for the portal; for a SaaS screen, defect raised to the vendor under R14	[T] R7, R14
A vendor misses its repair time	the authority publishes an alternative path (phone line, staffed desk) for that task until fixed; the clause's remedy applies	[A]
Worker cannot sign in on event day	gate supervisor issues a one-time link from the staff desk; the shift is recorded by hand and entered afterwards	[A]
SCIM provisioning fails for a surface	change queued and retried; workers keep the role they had; alert to the identity team	[A]
A vendor's report is older than 12 months at renewal	renewal waits for a current report or the authority's own audit of that product	[A] R9

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6 · Limits

- Which compliance date binds the authority is a legal question for its counsel; this design meets the earlier one.
- The DOJ dates are from a summary of the Federal Register text; the published rule is read again at design freeze.
- An audit with zero failures is a point in time; a vendor's release after it can introduce a failure the authority finds only at its next check.
- The four reader pairings are an assumption; a survey of the workforce's own assistive technology replaces them.
- The football tenant's fan website is outside this document; it is the tenant's, not the authority's.
- No figure here has been measured.

7 · Lessons learned

None yet — this is a design study; populated after the first build against it.

8 · The author

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Signed off by Edwin Ozer, Founder.

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SYMBEEO

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Figures are as published by their sources on the dates given in this document; figures marked [A] are assumptions.

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