

Scheduling Portal Requirements Document

Target release	06 May 2022
Document status	DRAFT
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Objective

Purpose: At Alaska Airlines one of the main safety concerns at the moment is that safety issues have been more prevalent when flying to or from small cities in Alaska than when flying in the lower 48 states in the US. Currently, there are 1,600 pilots based in Seattle and 300 pilots based in Anchorage Alaska that are allowed to fly to these remote airports in Alaska. It would be safer to only have pilots from Anchorage fly to these airports in Alaska because there is a smaller group of them which would allow them to have more experience and be more comfortable flying to those airports. This would likely reduce the safety issues that are occurring when flying to and from airports in Alaska. The reason this solution has not been implemented is that pilot scheduling would cost more, and it would be hard to properly allocate a smaller group of pilots to these flights. The proposed system would update the scheduling software algorithms at Alaska Airlines to make trips out of Alaska more efficient and reduce costs to the company while being safer.

Overview: Internal division of Alaska is made up of 3 groups. The Alaska Air Group is made up of the executive management team, legal team, human resources, marketing, and information technology. Alaska Airlines is made up of flight operations, in flight team, Maintenance, and customer service. Horizon Air is also made up of flight operations, in flight team, maintenance, and customer service. The external division is made up of ground service vendors and catering.

Success metrics

Goal	Metric
Reduce the number of plane accidents	Accidents reported decrease by 25%
Reduce the number of employee injuries	Employee injuries reported decrease by 50%
Continue to operate the airline safely	Safety incidents do not increase by more than 3%
Improve safety metrics for flying	New methods to analyze safety data are developed
Create new safety metrics for flying	Additional safety metrics are added
Increase reporting of incidents in air and ground	Incident reporting increases by 5%

Assumptions

- Having only pilots based in Alaska fly to and from airports in Alaska would be safer than both pilots based in Seattle and Alaska.
- The safety issues are occurring due to pilots not flying to these airports frequently and a lack of experience.
- Pilots based in Alaska will be willing to only fly trips to locations in Alaska.
- Software developers can improve the scheduling algorithm.
- System can be built within budget.
- System can be built by the target release date.

Requirements

User Stories:

Key	Summary
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AA-27	As a scheduling agent, I want to be able to add data to a blank trip so it can be assigned to someone	⬆
AA-26	As a flight attendant, I want to be able to post my trip so that another flight attendant can pick it up	⬆
AA-25	As a pilot, I want to be able to post my trip so that another pilot can pick it up	⬇
AA-24	As a flight attendant, I want to be able to pick up a trip from another flight attendant so that I can work more hours	⬇
AA-23	As a pilot, I want to be able to pick up a trip from another pilot so that I can work more hours	⬇
AA-22	As a flight attendant, I want to trade a trip with another flight attendant so that I can have flexibility in my schedule	⬇
AA-21	As a flight attendant, I want to request to have a trip added to my schedule so that I can pick which trip I want	⬆
AA-20	As a flight attendant, I want to request vacation time so that I will have set dates off of work	⬇
AA-19	As a pilot, I want to request vacation time so that I will have set dates off of work	⬇
AA-18	As a scheduling agent, I want to be able to log in to the scheduling software so that I can add, remove, or edit a trip	⬆
AA-17	As a pilot, I want to be able to trade a trip with another pilot so that I can have flexibility in my schedule	⬇
AA-16	As a flight attendant, I want to log in to the schedule portal so that I can see my schedule	⬆
AA-15	As a pilot, I want to log in to the schedule portal so that I can see my schedule	⬆
AA-14	As a scheduling agent, I want to create a new trip so that it can be assigned to an employee	⬆
AA-13	As a scheduling agent, I want to be able to assign a trip to an employee so that I can create their schedule	⬆
AA-12	As a scheduling agent, I want to remove a trip from an employee so that I can edit their schedule	⬆
AA-11	As a pilot, I want to request to have a trip added to my schedule so that I can pick which trip I want.	⬆
AA-2	Document business rules	⬆

18 issues

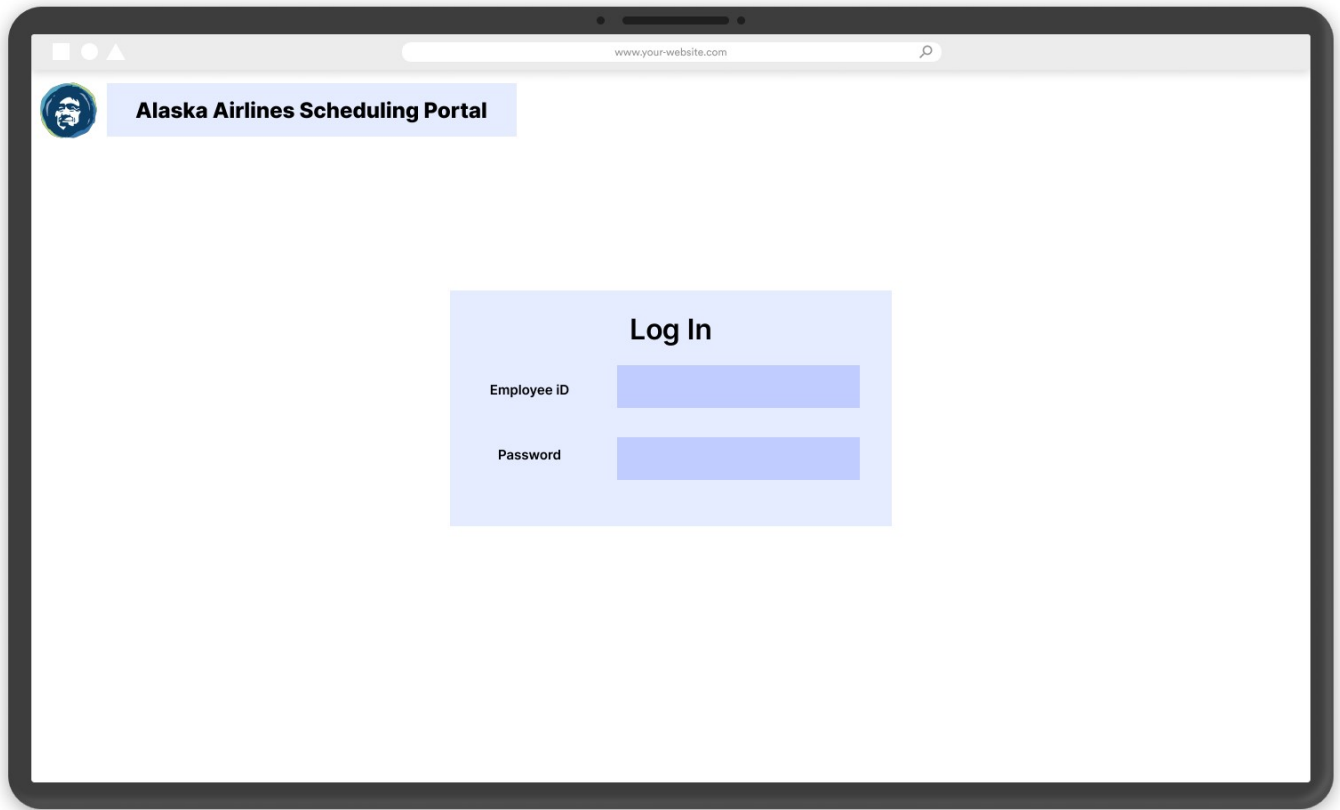
Requirements:

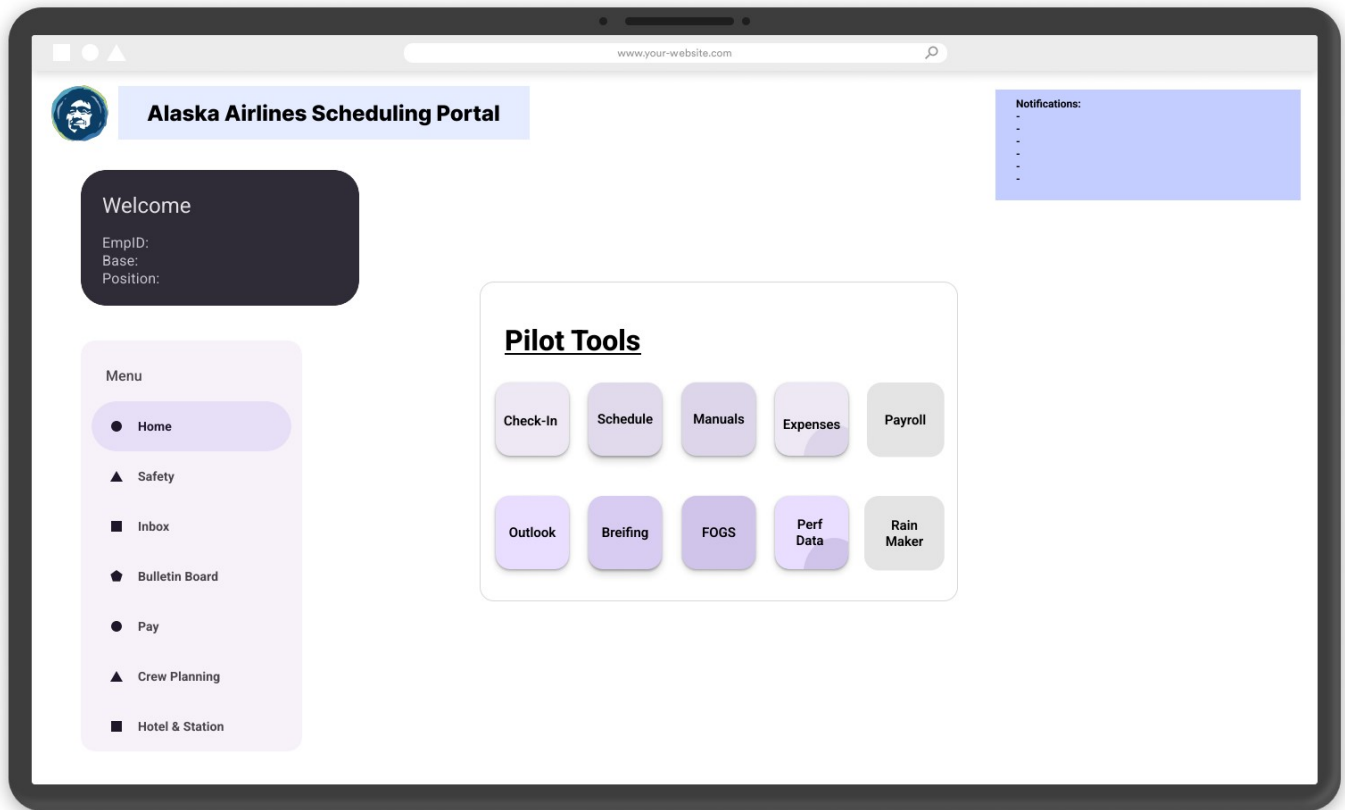
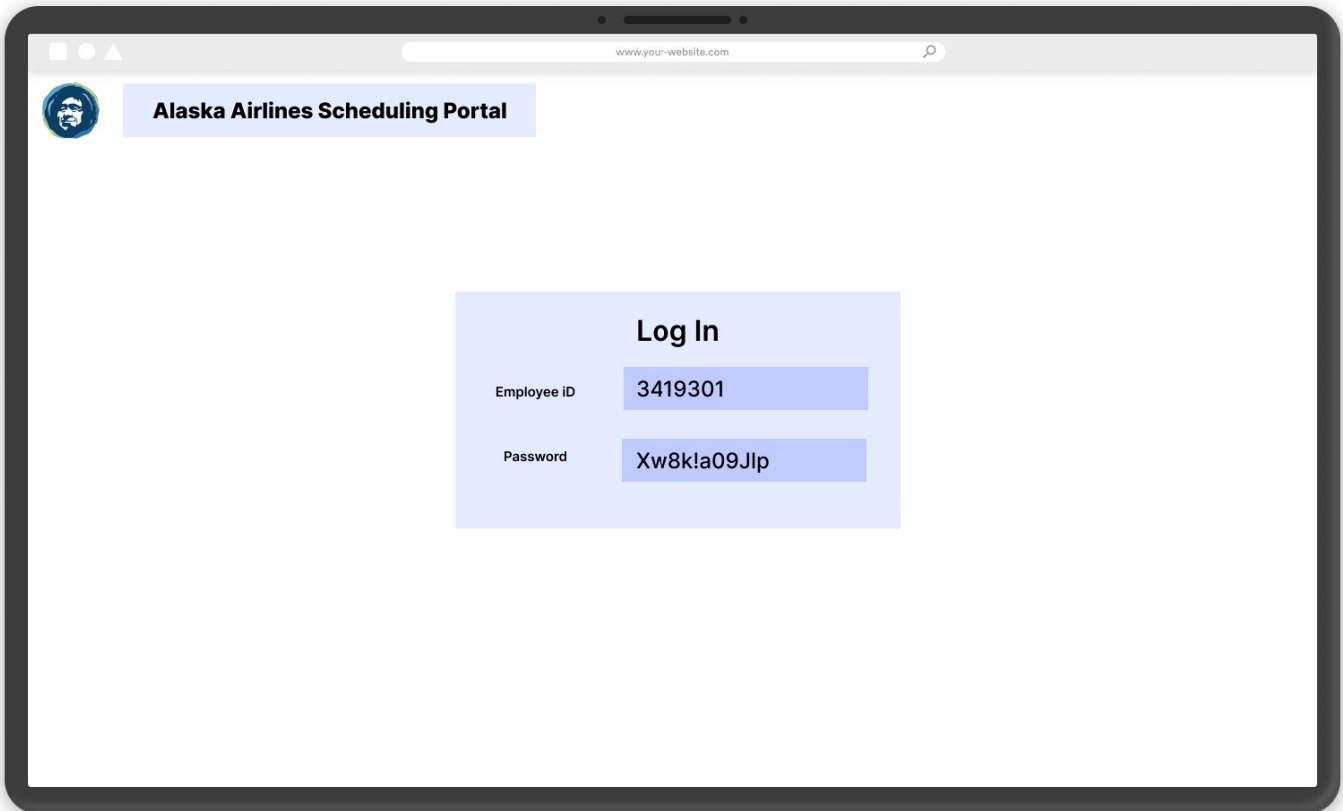
Key	Summary	P
AA-62	The previous version of the scheduling software shall be shut down upon rollout of the new version.	⬇
AA-61	The scheduling software shall be installed on all company computers upon rollout.	⬆
AA-60	The scheduling software shall implement data from previous scheduling portal into the new scheduling portal.	⬇
AA-59	The scheduling software shall not go down for maintenance for more than one hour per day.	⬆
AA-58	The scheduling software shall be approved by the safety department, scheduling department, and pilot union.	⬆
AA-57	The scheduling software shall be compatible with windows, apple, and android devices.	⬆
AA-56	The scheduling software shall provide interactive user training after each employees first log in	⬇
AA-55	The scheduling software shall include a database that holds pilot and trip information	⬆
AA-54	The scheduling software shall not exceed the budget determined by Alaska Airlines	⬆
AA-48	The scheduling software shall allow pilots to pick up a trip from a trip listed on the open time page of the scheduling portal..	⬆
AA-47	The scheduling software shall provide an option to download a pdf of bid sheets.	⬇
AA-46	Pilots shall view bid sheets, using Alaska Airlines scheduling portal, from the bid subpage.	⬆
AA-45	The scheduling software shall provide a filtration system on the trip trade board.	⬇
AA-44	The scheduling software shall allow pilots to post a trip they have been assigned to the trading board on the schedule portal.	⬆
AA-43	The scheduling software shall require an employee ID and unique password to log into the scheduling portal.	⬆
AA-42	The software shall provide scheduling agents a means to approve or deny an employee time off request.	⬇

AA-41	The scheduling software shall send all employee time-off requests to scheduling agents.	⏏
AA-40	The scheduling software shall allow pilots to request a set of days off, using the scheduling portals time off page.	✓
AA-39	Scheduling agents shall be able to remove a trip, using Alaska Airlines scheduling software, from an individual pilot's schedule.	⬆

19 issues

User interaction and design





? Open Questions

Question	Answer	Date Answered
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How much training will employees require to adapt to the new portal?		
How many scheduling agents will be needing for the system to function once released?		
Will developers be able to build portal within target date or will more developers need to be hired?		
What features do employees want added to the portal?		

Out of Scope

The solution will not redo specific routes to make them more efficient. It will also not reformat the bid sheets only the general layout of the scheduling portal. New functionality of the platform will also not be added. App for the scheduling portal will not be developed in this release. A mobile device app will also not be available.