

Card-Based Flight Booking

Wireframe

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Slide 1: Frontpage

Frontpage content



Clicking this button will initiate booking process (Slide 2).
Transition: the screen slides up revealing the next screen.

BOOK A FLIGHT

Application-wide rules:
All controls are sized in such a way as to exactly fit screen width.

Every card has a part that has flexible height. This part should be used to adjust to various screen aspect-ratios. These parts will be marked as **flexible height**.

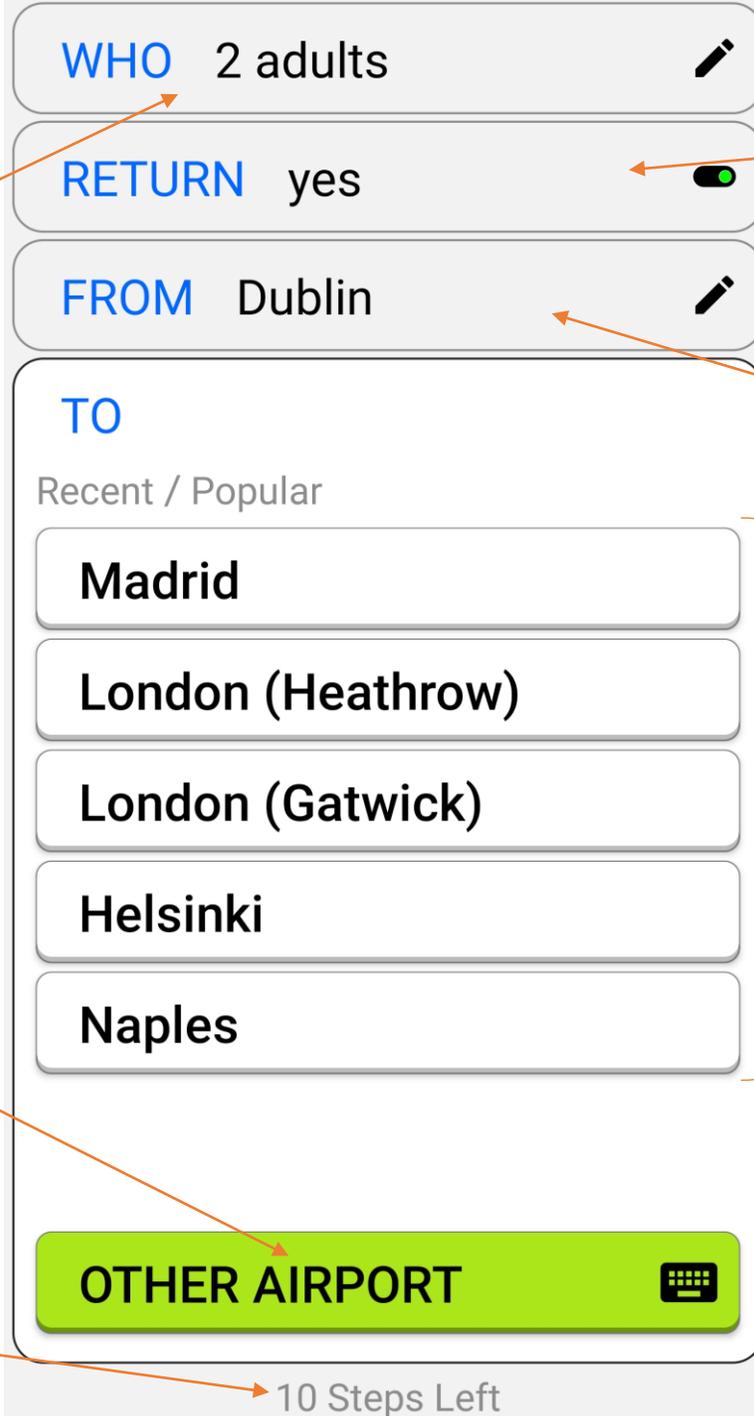
This design is optimized for smartphones.

Slide 2: Destination card (quick mode)

Pre-filled with 2 adults.
If user travelled 2 times with a different number of companions, the default value should change to that. Clicking the card should expand it to allow selection of a different number of passengers.

When clicked will transform the card as follows: make it take 90% of screen height, replace controls as shown on Slide 3 and scroll down completely after 100 milliseconds.

Number of steps left until the purchase is completed. Always visible at the bottom of the list.



The image shows a vertical stack of UI elements for a flight booking interface. At the top, there are three compact cards: 'WHO 2 adults' with a pencil icon, 'RETURN yes' with a green toggle switch, and 'FROM Dublin' with a pencil icon. Below these is a larger 'TO' card. The 'TO' card has a header 'Recent / Popular' and a list of five destination buttons: 'Madrid', 'London (Heathrow)', 'London (Gatwick)', 'Helsinki', and 'Naples'. At the bottom of the 'TO' card is a green button labeled 'OTHER AIRPORT' with a keyboard icon. Below the 'TO' card is a grey bar with the text '10 Steps Left'.

Default value is always "yes"
Clicking the card simply toggles it between "yes" and "no".
When value is "no" the toggle icon should become 

Default value is user's current location.
When clicked, will expand the card (see Slide 4)
Transition: top of card stays in the same place, Destination card slides down.

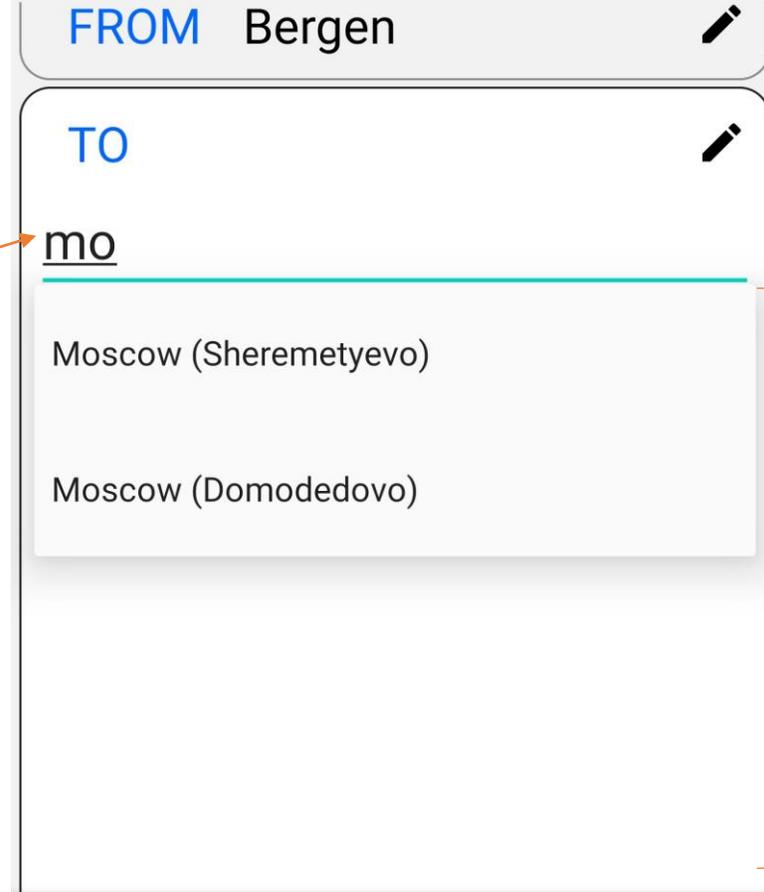
Flexible Height.
The number of buttons depends on screen height (aspect-ratio).
Locations are picked from user's recent destinations. Otherwise these are popular/suggested locations.
Clicking any button will select that location, make the card compact e.g.



The image shows a compact version of the 'TO' card. It consists of a single button labeled 'TO Naples' with a pencil icon on the right side.

append Flight 1 card (date mode) at the bottom of the list (see Slide 5) and scroll down completely after 100 milliseconds.

Slide 3: Destination card (input mode)



Textbox already focused when entering this state. Typing text result in suggestion appearing below. Suggestions should start appearing after typing one letter.

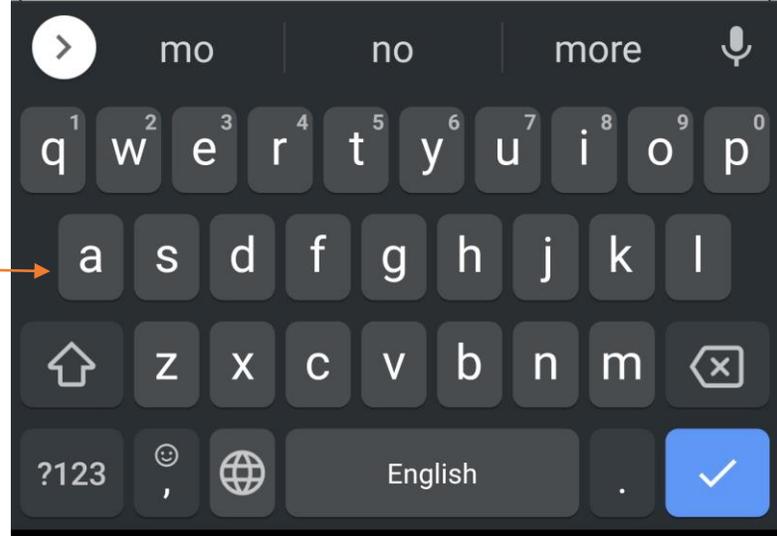
Card takes up 90% of the screen. 10% above show most of the previous card in compact state. All subsequent cards behave the same except summary card (Slide 17)

Flexible height. Number of suggestions is limited by available height. Clicking any location will select that location, make the card compact e.g.



append Flight 1 card (date mode) at the bottom of the list (see Slide 5) and scroll down completely after 100 milliseconds.

The keyboard appears immediately upon entering this state. Standard text keyboard.



Slide 4: Origin card (optional step)

Works the same as Destination card in input mode (see Slide 3). For example clicking on "Bergen" will result in the screen looking the same as on Slide 2 except Origin card now contains Bergen rather than Dublin.

RETURN yes

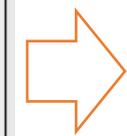
FROM 

be

- Belfast
- Bergen
- Berlin (Tegel)
- Berlin (Schönefeld)

Navigation: > | be | best | because | 

Keyboard: q w e r t y u i o p | a s d f g h j k l |  z x c v b n m  | ?123 |   English | 



WHO 2 adults 

RETURN yes

FROM Bergen 

TO 

Recent / Popular

- Madrid
- London (Heathrow)
- London (Gatwick)
- Helsinki
- Naples

OTHER AIRPORT 

10 Steps Left

Slide 5: Flight 1 card (date mode)

TO Naples

FLIGHT 1

Price of the cheapest ticket is shown for each day

	Mon	Tue	Wed	Thu	Fri	Sat	Sun
	1	2	3	4	5	6	7
				TODAY	SOLD	SOLD	SOLD
M A R C H	8	9	10	11	12	13	14
	€198	€57	€105	SOLD	€159	€50	€117
	15	16	17	18	19	20	21
	€206	€54	€58	€137	€157	€161	€217
	22	23	24	25	26	27	28
	€117	€219	€212	€206	€45	€48	€95
	29	30	31	1	2	3	4
	€53	€194	€212	€43	€65	€167	€87
A P R I L	5	6	7	8	9	10	11
	€204	€62	€114	€130	€234	€101	€54
	12	13	14	15	16	17	18
	€238	€233	€68	€157	€223	€47	€73
	19	20	21	22	23	24	25

Please select one of the dates on the calendar

SELECT NEXT DATE

9 Steps Left

Greyed out because date is before today. Can't be selected.

This is a header and doesn't scroll together with the calendar.

Today's date. Can't be selected.

Flexible height. Inner view is much longer and can be scrolled. After 100ms from entering this state scrolls down to current date (as shown). This is done to show the use that it can be scrolled.

Can't be selected because sold out. Example of dates that don't have a flight is seen on Slide 7.

If a date has a cheap flight (bottom 10% of price range), the price is highlighted.

A date can be selected by clicking a valid (not greyed out) cell in the calendar. Here we assume user clicked March 17 (See Slide 6).

Button is greyed out and not clickable until a date is selected.

FLIGHT 1

Price of the cheapest ticket is shown for each day

	Mon	Tue	Wed	Thu	Fri	Sat	Sun
	1	2	3	4	5	6	7
				TODAY	SOLD	SOLD	SOLD
M A R C H	8	9	10	11	12	13	14
	€198	€57	€105	SOLD	€159	€50	€117
	15	16	17	18	19	20	21
	€206	€54	€58	€137	€157	€161	€217
	22	23	24	25	26	27	28
€117	€219	€212	€206	€45	€48	€95	
29	30	31	1	2	3	4	
€53	€194	€212	€43	€65	€167	€87	
A P R I L	5	6	7	8	9	10	11
	€204	€62	€114	€130	€234	€101	€54
	12	13	14	15	16	17	18
	€238	€233	€68	€157	€223	€47	€73
19	20	21	22	23	24	25	

Prices for selected day: €58, €99, €113, €137

SELECT NEXT DATE

Cell is highlighted because the user clicked it. The user can still click other valid cells to select a different date.

Button is now green and clickable because a valid date is selected. Clicking it will result in current card becoming compact e.g.

FLIGHT 1 MAR 17

Flight 2 (date mode) being appended at the bottom of the list and full scroll down after 100ms.

Shows cheapest 4-5 tickets available on currently selected date. Updates every time a date is selected.

Slide 7: Flight 2 card (date mode)

FLIGHT 1 MAR 17

FLIGHT 2

Price of the cheapest ticket is shown for each day

	Mon	Tue	Wed	Thu	Fri	Sat	Sun
M A R C H	1	2	3	4	5	6	7
	NA	NA		TODAY			
	8	9	10	11	12	13	14
	NA	NA		NA			
	15	16	17	18	19	20	21
	NA	NA	Flight 1	NA	€82	€101	€45
	22	23	24	25	26	27	28
NA	NA	€46	NA	€182	€157	€214	
29	30	31	1	2	3	4	
NA	NA	€95	NA	€77	€239	€54	
A P R I L	5	6	7	8	9	10	11
	NA	NA	€110	NA	€58	€149	€179
	12	13	14	15	16	17	18
	NA	NA	€110	NA	€211	€227	€70
19	20	21	22	23	24	25	

Please select one of the dates on the calendar

FIND TICKET 1

8 Steps Left

Greyed out because there are no flights on that weekday available for that route.

Date of Flight 1. This day and days before it are greyed out.

Works the same as Flight 1 card in date mode (see Slide 5 & 6).

Clicking the button results in this card becoming compact and Flight 1 card expanding in ticket selection mode. 100ms later the two cards smoothly swap places. See prototype video at 3:20 <https://youtu.be/qXxFiJuV4B8?t=201>

FLIGHT 1 MAR 17

FLIGHT 2

Price of the cheapest ticket is shown for each day

	Mon	Tue	Wed	Thu	Fri	Sat	Sun
M A R C H	1	2	3	4	5	6	7
	NA	NA		TODAY			
	8	9	10	11	12	13	14
	NA	NA		NA			
	15	16	17	18	19	20	21
	NA	NA	Flight 1	NA	€82	€101	€45
	22	23	24	25	26	27	28
NA	NA	€46	NA	€182	€157	€214	
29	30	31	1	2	3	4	
NA	NA	€95	NA	€77	€239	€54	
A P R I L	5	6	7	8	9	10	11
	NA	NA	€110	NA	€58	€149	€179
	12	13	14	15	16	17	18
	NA	NA	€110	NA	€211	€227	€70
19	20	21	22	23	24	25	

Prices for selected day: €239, €276, €306, €342

FIND TICKET 1

8 Steps Left



Slide 8: Flight 1 card (ticket selection mode)

Switches the tickets being sorted by price (lowest first) or by duration (shortest first). Default is Price. Clicking on "Duration" will cause it to become green, cause "Price" button to become white and clickable, and cause tickets to smoothly rearrange themselves in the correct order.

Flexible height. If there are more tickets than can fit on the screen becomes scrollable. Clicking any ticket will select it and immediately move to the next step (see Slide 9)

FLIGHT 2 APR 3

FLIGHT 1

◀ MAR 17 ▶ ✎

Sort By **Price** Duration Indirect

Dublin	→	Naples	
12:30	2h15m	15:45	€58
Dublin	→	Naples	
16:25	2h35m	19:00	€99
Dublin	→	Naples	
10:35	1h55m	12:25	€113
Dublin	→	Naples	
22:55	2h10m	1:05	€137

7 Steps Left

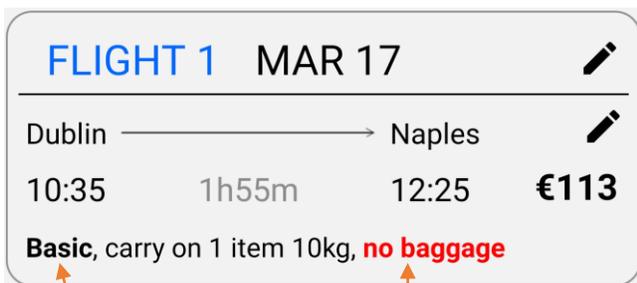
Clicking this should switch Flight 1 card back into date selection mode.

The arrow buttons can be used to adjust the date by one e.g. left for March 16 and right for March 18. This should immediately update the list of tickets below.

Toggles whether indirects flights are shown in the list of tickets below. Clicking it will make indirect flights disappear from the list and the toggle button becoming

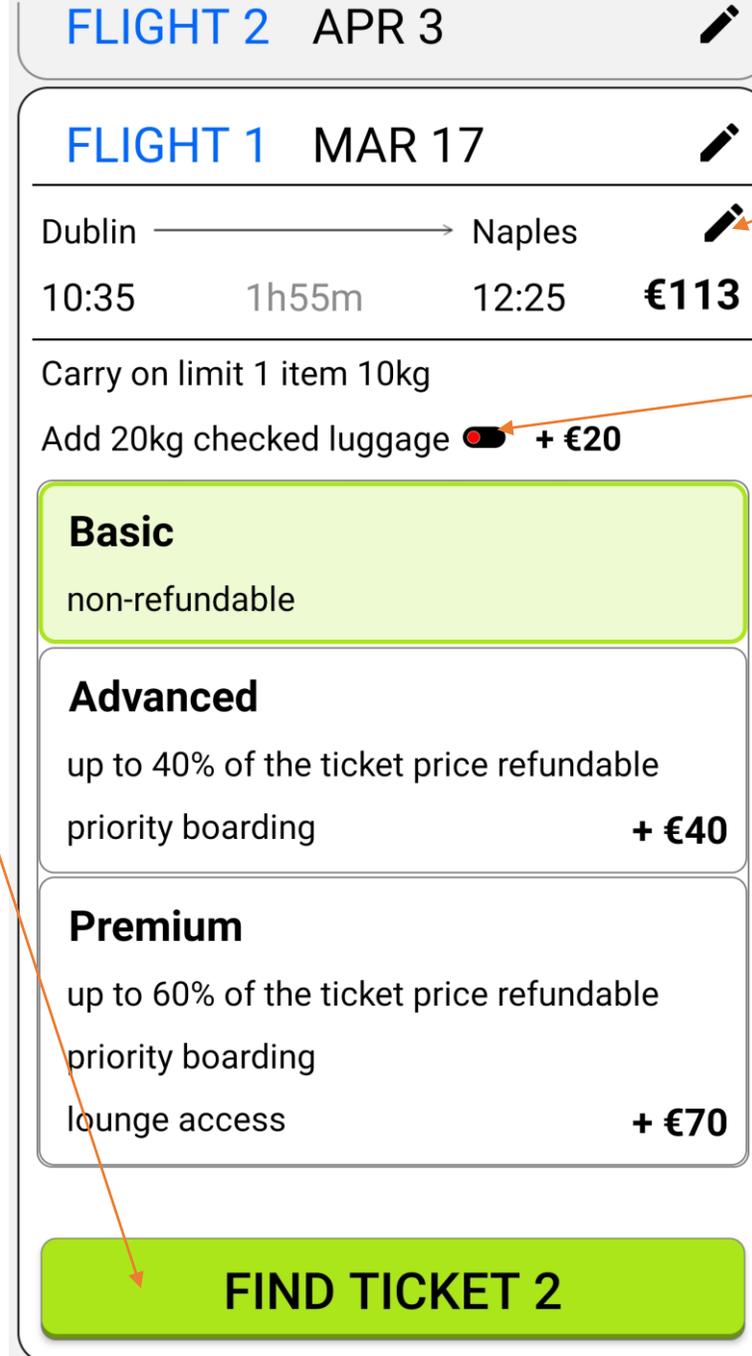
Slide 9: Flight 1 card (fare selection mode)

This button is green and clickable immediately upon entering this state as there are no compulsory actions the user need to do on this card. Clicking will result in this card becoming compact, Flight 2 card expanding in ticket selection mode and 100ms later the two cards swapping with each other (Slide 10). See prototype demo at 4:30 <https://youtu.be/qXxFiJuV4B8?t=270> Compact mode:



Chosen fare type

If user selects baggage this text is black, not bold and says "baggage 20kg".



Clicking this should switch Flight 1 card back into ticket selection mode.

Toggles whether checked luggage is purchased. Default value is no. Clicking it will result in this ticket costing 20 euro more, which will be visible in this card's compact mode.

Flexible height. Ideally all three buttons should fit on the screen. But if the screen is unusually short, this part can become scrollable. Clicking "Advanced" or "Premium" buttons will result in that button becoming green, "Basic" button becoming white and clickable, and the total price of the ticket increasing by the relevant amount, which will be visible in compact mode.

Slide 10: Flight 2 card (ticket selection & fare selection mode)

Works the same as Flight 1 card in ticket selection and then fare selection modes.

Clicking will result in the card becoming compact, Person 1 details appearing below and fully scrolling down 100ms later. No swapping. (See Slide 11)

Basic, carry on 1 item 10kg, **no baggage**

FLIGHT 2 ◀ APR 3 ▶ ✎

Sort By **Price** Duration Indirect

Naples	→	Dublin	
12:30	2h15m	15:45	€239
Naples	→	Dublin	
16:25	2h35m	19:00	€276
Naples	→	Dublin	
10:35	1h55m	12:25	€306
Naples	→	Dublin	
22:55	2h10m	1:05	€342

6 Steps Left

Basic, carry on 1 item 10kg, **no baggage**

FLIGHT 2 APR 3 ✎

Naples → Dublin ✎

10:35 1h55m 12:25 **€306**

Carry on limit 1 item 10kg

Add 20kg checked luggage + €20

Basic
non-refundable

Advanced
up to 40% of the ticket price refundable
priority boarding + €40

Premium
up to 60% of the ticket price refundable
priority boarding
lounge access + €70

PERSON 1 DETAILS

6 Steps Left

Slide 11: Person 1 details card

Basic, carry on 1 item 10kg, **no baggage**

PERSON 1

Male Female

Scan passport to complete the form



First name

Surname

Date of Birth

DD/MM/YYYY

Passport number

Contact method

Email

SMS

WhatsApp

Email Address

NEXT PERSON

User will have to click either "Male" or "Female". Clicking will make that button become green.

Uses numeric keyboard. After entering 2 digits automatically places a /. After next 2 digits also places /. Validation: must be a valid date in the past and match person status (adult/child). Enter switches to passport field.

The button becomes green and clickable only when gender was selected and all text fields passed validation. Clicking will make the card compact e.g.

PERSON 1 Viacheslav F



and add Person 2 details card below.
If the full name is more than 12 characters, only the first name of surname is displayed on the card.

Clicking will switch to camera mode. After picture is taken program will attempt to extract First name, surname, dob and passport number. If successful, this information is filled into the textboxes.

Already focused, but no keyboard until clicked. Users normal text keyboard that capitalizes the first letter. Validation: only alphabetical characters, at least 2 symbols. Pressing enter will switch focus to Surname text field. Validation failure brings up error tooltip upon lost focus.

Same keyboard and validation as First name. Enter switches focus to DoB.

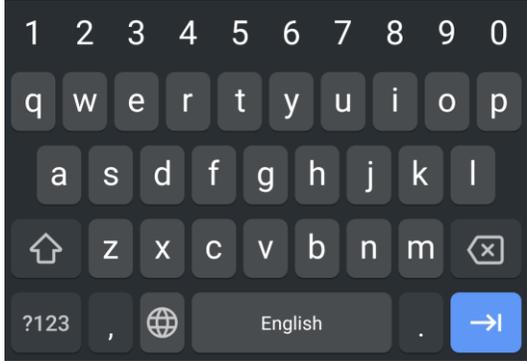
Passport number, Contact method and Email are described on Slide 12

5 Steps Left

Slide 12: Person 2 details card

Works the same as Person 1 card. If the whole page doesn't fit on the card the area between card title and the bottom button becomes scrollable.

Uses special letter and digit keyboard as below. Validation: at least 8 letters or digits. Enter switches to Email field.



If user clicks while the button is grey, invalid fields are highlighted and a tooltip shows an error message. If button is green, makes this card compact and adds Flight 1 seats card below (see Slide 13).

PERSON 1 Viacheslav F

PERSON 2

Male Female Scan passport to complete the form

First name

Surname

Date of Birth

Passport number

Contact method Email SMS WhatsApp

Email Address

SELECT SEATS

4 Steps Left

Clicking SMS or WhatsApp will make that button green, Email button white and clickable, make the label below show "Phone number" and switch the text field mode input to phone number.

If contact mode is email this field uses email input keyboard and validation checks it is a valid email. If contact mode is SMS or WhatsApp this field uses phone number input keyboard and validation checks it is a valid phone number.

FLIGHT 1 SEAT

Viacheslav F Chi Hung €0

Front €10 Extra Legroom €5 Regular FREE

Passenger names in the same order as the Person details cards were filled. First person is already selected. Second person can't be clicked until the first person was assigned a seat.

Flexible Height. The view is much longer (32 seats), can be scrolled.

Shows total cost of seat selection

This place is reserved for seat numbers. Must be big enough so that seat selection doesn't result in the button resizing

This seat is already taken. Not clickable.

This button is greyed out and not clickable until all passengers are assigned a seat. A seat is selected by clicking an available seat.

NEXT FLIGHT

PERSON 2 Chi Hung

FLIGHT 1 SEAT

Viacheslav F 4E Chi Hung €10

Front €10 Extra Legroom €5 Regular FREE

1	Front	Extra Legroom	Regular
1	Front	Extra Legroom	Regular
2	Front	Extra Legroom	Regular
3	Front	Extra Legroom	Regular
4	Front	Extra Legroom	Regular
5	Front	Extra Legroom	Regular
6	Front	Extra Legroom	Regular
7	Front	Extra Legroom	Regular

NEXT FLIGHT

3 Steps Left

Because person 1 already selected a seat, person 2 is now highlighted.

Total was updated because currently selected seat costs 10 euro.

User clicked here. Because person 1 was selected, their initials appear on the seat.

Button still not clickable because not all passengers have seats

PERSON 2 Chi Hung 

FLIGHT 1 SEAT

Viacheslav F **4E** Chi Hung **4F** **€20**

 Front €10	 Extra Legroom €5	 Regular FREE
   1   		
   2   		
   3   		
   4   		
   5   		
   6   		
   7   		
   8   		

NEXT FLIGHT

3 Steps Left

These are now clickable. Clicking a person will erase their seat selection, update total and let the user click a valid seat to assign it to the selected person. While it is possible to choose a seat, the person's button is green.

Both passengers have a seat, so button is clickable. Clicking will make this card compact e.g.

FLIGHT 2 SEAT 7E 7F €0 

and add Flight 2 seats at the bottom of the list. (See Slide 16)

Slide 16: Flight 2 seats card

Works the same as Flight 1 seat selection card (See Slides 13-15)

FLIGHT 1 SEAT 4E 4F €20 

FLIGHT 2 SEAT

Viacheslav F **7E** Chi Hung **7F** €0

 Front €10 |  Extra Legroom €5 |  Regular FREE

			1			
			2			
			3			
			4			
			5			
			6			
			7			
						

SUMMARY

2 Steps Left

Clicking will result in this card becoming compact and Summary card being added at the bottom of the list. (See Slide 17)

Slide 17: Summary card

On this screen the user can review all the decisions they made during the booking process. They can click any card to expand it. If they make a modification and this invalidates subsequent cards they are warned and if they choose to proceed, that invalid cards are destroyed. For example changing destination invalidates both flight cards and both seat cards. The user is then taken back to Flight 1 date selection. They then proceed as normal except when they get to Person 1 & 2 cards they are already filled in.

FLIGHT 1 MAR 17 

Dublin  Naples 

10:35 1h55m 12:25 **€113**

Basic, carry on 1 item 10kg, **no baggage**

FLIGHT 2 APR 3 

Naples  Dublin 

10:35 1h55m 12:25 **€306**

Basic, carry on 1 item 10kg, **no baggage**

PERSON 1 Viacheslav F 

PERSON 2 Chi Hung 

FLIGHT 1 SEAT 4E 4F €20 

FLIGHT 2 SEAT 7E 7F €0 

TOTAL €439

PROCEED TO CHECKOUT

1 Steps Left