

CLAIMS

1. A method comprising:

messaging, by a navigation service, source control logic associated with a source screen currently being displayed on a display device and destination control logic associated with a destination screen to be displayed on the display device resulting in identification of an intersecting set of names of user interface elements between a first set of names of user interface elements currently being presented on the source screen and a second set of names of user interface elements required for presentation on the destination screen;

in response to receiving respective indications from the source control logic that a source transition script is ready and from the destination control logic that a destination transition script is ready, coordinating, by the navigation service, concurrent execution of the source transition script by the source control logic and the destination transition script by the destination control logic for transitioning from display of the source screen to display of the destination screen on the display device;

wherein execution of the source transition script comprises the source control logic removing, from presentation on the source screen, user interface elements of the first set of names of user interface elements that are not in the intersecting set of names of user interface elements; and

wherein execution of the destination transition script comprises the destination control logic instantiating user interface elements of the second set of names of user interface elements that are not in the intersecting set of names of user interface elements, and taking ownership of user interface elements in the intersecting set of names of user interface elements.

2. The method of claim 1, wherein the messaging comprises:

communicating, by the navigation service, a first message to the destination control logic, wherein the first message requests names of user interface elements required for presentation on the destination screen;

receiving, by the navigation service, a first response from the destination control logic, wherein the first response includes the second set of names of user interface elements required for presentation on the destination screen;

communicating, by the navigation service, a second message to the source control logic, wherein the second message includes the second set of names of user interface elements;

receiving, by the navigation service, a second response from the source control logic, wherein the second response includes the intersecting set of names of user interface elements;

communicating, by the navigation service, a third message to the destination control logic, wherein the third message includes the intersecting set of names of user interface elements.

3. The method of claim 1, wherein the messaging comprises:

communicating, by the navigation service, a first message to the source control logic, wherein the first message requests names of user interface elements currently being presented on the source screen;

receiving, by the navigation service, a first response from the response from the source control logic, wherein the first response includes the first set of names of user interface elements currently being presented on the source screen;

communicating, by the navigation service, a second message to the destination control logic, wherein the second message includes the first set of names of user interface elements;

receiving, by the navigation service, a second response from the destination control logic, wherein the second response includes the intersecting set of names of user interface elements; and

communicating, by the navigation service, a third message to the source control logic, wherein the third message includes the intersecting set of names of user interface elements.

4. The method of claim 1, wherein the messaging comprises:

communicating, by the navigation service, a first message to the destination control logic, wherein the first message requests names of user interface elements required for presentation on the destination screen;

receiving, by the navigation service, a first response from the destination control logic, wherein the first response includes the second set of names of user interface elements required for presentation on the destination screen;

communicating, by the navigation service, a second message to the source control logic, wherein the second message requests names of user interface elements currently being presented on the source screen;

receiving, by the navigation service, a second response from the source control logic, wherein the second response includes the first set of names of user interface elements currently being presented on the source screen; and

determining, by the navigation service, the intersecting set of names of user interface elements.

5. The method of claim 1, further comprising:

providing, by the navigation service, transition effect information from the destination control logic to the source control logic related to at least one visual effect.

6. The method of claim 4, further comprising communicating, by the navigation service, a third message to the destination control logic, wherein the third message includes the intersecting set of names of user interface elements.

7. The method of claim 4, further comprising:

communicating, by the navigation service, a fourth message to the source control logic, wherein the fourth message includes a first list of the user interface elements of the first set of names of user interface elements that are not in the intersecting set of names of user interface elements; and

communicating, by the navigation service, a third message to the destination control logic, wherein the third message includes a second list of the user interface elements of the second set of names of user interface elements that are not in the intersecting set of names of user interface elements.

8. The method of claim 1, further comprising generating, by the source control logic, the source transition script based on the intersecting set of names of user interface elements.

9. The method of claim 1, further comprising generating, by the destination control logic, the destination transition script based on the intersecting set of names of user interface elements.

10. The method of claim 1, further comprising relinquishing, by the source control logic, ownership of the user interface elements in the intersecting set of names of user interface elements.

11. A system comprising:

a processor; and

a memory communicatively coupled to the processor, the memory having stored therein computer-executable instructions, comprising:

a navigation service component is configured to:

communicate with source control logic associated with a source screen currently being displayed via a device and destination logic associated with a destination screen to be displayed via the device to identify an intersecting set of names of user interface elements between a first set of names of user interface elements currently being presented on the source screen and a second set of names of user interface elements required for presentation on the destination screen;

in response to receipt of respective indications from the source control logic that a source transition script is ready and from the destination control logic that a destination transition script is ready, coordinate concurrent execution of the source transition script by the source control logic and the destination transition script by the destination control logic for perform a transition from display of the source screen via the device to display of the destination screen via the device;

wherein execution of the source transition script comprises removal, from presentation on the source screen, user interface elements of the first set of names of user interface elements that are not in the intersecting set of names of user interface elements; and

wherein execution of the destination transition script comprises instantiation of user interface elements of the second set of names of user interface elements that are not in the intersecting set of names of user interface elements, and transfer of ownership of the intersecting set of names of user interface elements.

12. The system of claim 11, wherein the communication with the source control logic and the destination control logic by the navigation service component comprises:

communication of a first message to the destination control logic, wherein the first message requests names of user interface elements required for presentation on the destination screen;

receipt of a first response from the destination control logic, wherein the first response includes the second set of names of user interface elements required for presentation on the destination screen;

communication of a second message to the source control logic, wherein the second message includes the second set of names of user interface elements;

receipt of a second response from the source control logic, wherein the second response includes the intersecting set of names of user interface elements;

communication of a third message to the destination control logic, wherein the third message includes the intersecting set of names of user interface elements.

13. The system of claim 11, wherein the communication with the source control logic and the destination control logic by the navigation service component comprises:

communication of a first message to the source control logic, wherein the first message requests names of user interface elements currently being presented on the source screen;

receipt of a first response from the response from the source control logic, wherein the first response includes the first set of names of user interface elements currently being presented on the source screen;

communication of a second message to the destination control logic, wherein the second message includes the first set of names of user interface elements;

receipt of a second response from the destination control logic, wherein the second response includes the intersecting set of names of user interface elements; and

communication of a third message to the source control logic, wherein the third message includes the intersecting set of names of user interface elements.

14. The system of claim 11, wherein the communication with the source control logic and the destination control logic by the navigation service component comprises:

communication of a first message to the destination control logic, wherein the first message requests names of user interface elements required for presentation on the destination screen;

receipt of a first response from the destination control logic, wherein the first response includes the second set of names of user interface elements required for presentation on the destination screen;

communication of a second message to the source control logic, wherein the second message requests names of user interface elements currently being presented on the source screen;

receipt of a second response from the source control logic, wherein the second response includes the first set of names of user interface elements currently being presented on the source screen; and

determination of the intersecting set of names of user interface elements.

15. The system of claim 14, wherein the communication with the source control logic and the destination control logic by the navigation service component further comprises:

communication of a third message to the destination control logic, wherein the third message includes the intersecting set of names of user interface elements.

16. The system of claim 14, wherein the communication with the source control logic and the destination control logic by the navigation service component further comprises:

communication of a fourth message to the source control logic, wherein the fourth message includes a first list of the user interface elements of the first set of names of user interface elements that are not in the intersecting set of names of user interface elements; and

communication of a third message to the destination control logic, wherein the third message includes a second list of the user interface elements of the second set of names of user interface elements that are not in the intersecting set of names of user interface elements.

17. The system of claim 16, wherein the execution of the source transition script further comprises relinquishment, by the source control logic, of ownership of the user interface elements in the intersecting set of names of user interface elements.

18. One or more non-transitory machine-readable media having machine-executable instructions stored thereon that, in response to execution, cause a processor to perform operations, comprising:

messaging, by a navigation service, source control logic associated with a source screen currently being displayed on a display device and destination control logic associated with a destination screen to be displayed on the display device resulting in identification of an intersecting set of names of user interface elements between a first set of names of user interface elements currently being presented on the source screen and a second set of names of user interface elements required for presentation on the destination screen;

in response to receiving respective indications from the source control logic that a source transition script is ready and from the destination control logic that a destination transition script is ready, coordinating, by the navigation service, concurrent execution of the source transition script by the source control logic and the destination transition script by the destination control logic for transitioning from display of the source screen being displayed via the device to display of the destination screen via the device;

wherein execution of the source transition script comprises the source control logic removing from presentation on the source screen, user interface elements of the first set of names of user interface elements that are not in the intersecting set of names of user interface elements, and

wherein execution of the destination transition script comprises the destination control logic instantiating user interface elements of the second set of names of user interface elements that are not in the intersecting set of names of user interface elements, and taking ownership of user interface elements in the intersecting set of names of user interface elements.

19. The one or more non-transitory machine-readable media of claim 18, wherein the messaging comprises:

- communicating, by the navigation service, a first message to the destination control logic, wherein the first message requests names of user interface elements required for presentation on the destination screen;

- receiving, by the navigation service, a first response from the destination control logic, wherein the first response includes the second set of names of user interface elements required for presentation on the destination screen;

- communicating, by the navigation service, a second message to the source control logic, wherein the second message includes the second set of names of user interface elements;

- receiving, by the navigation service, a second response from the source control logic, wherein the second response includes the intersecting set of names of user interface elements;
- communicating, by the navigation service, a third message to the destination control logic, wherein the third message includes the intersecting set of names of user interface elements.

20. The one or more non-transitory machine-readable media of claim 19, wherein the messaging comprises:

- communicating, by the navigation service, a first message to the source control logic, wherein the first message requests names of user interface elements currently being presented on the source screen;

- receiving, by the navigation service, a first response from the response from the source control logic, wherein the first response includes the first set of names of user interface elements currently being presented on the source screen;

- communicating, by the navigation service, a second message to the destination control logic, wherein the second message includes the first set of names of user interface elements;

- receiving, by the navigation service, a second response from the destination control logic, wherein the second response includes the intersecting set of names of user interface elements; and

communicating, by the navigation service, a third message to the source control logic, wherein the third message includes the intersecting set of names of user interface elements.