

including steps for operating a touch screen to activate one of a plurality of virtual GUI items, the steps of the computer program comprising:

determining a touch location based on location data pertaining to touch input on the touch screen, wherein the touch input is intended to activate one of the plurality of virtual GUI items;

for each of the plurality of virtual GUI items, each virtual GUI item having a set of at least one GUI item location corresponding to it, determining a parameter for that virtual GUI item that relates the touch location and the set of at least one item location corresponding to that virtual GUI item;

processing the determined parameters to determine one of the virtual GUI items; and

generating a signal indicating activation of the determined one of the virtual GUI items.

32. The computer-readable medium of claim 31, wherein:

the plurality of virtual GUI items are virtual keys of a virtual keyboard, and the set of at least one items locations is a set of at least one key location;

the determined parameter for each virtual key indicates, when considered relative to the determined parameters for the other virtual keys, a likelihood that virtual key is the one the touch input is intended to activate; and

processing the determined parameters for the virtual keys includes determining from the determined parameters the virtual key for which the determined parameter indicates the highest likelihood.

33. The computer-readable medium of claim 32, wherein:

determining the parameter for each virtual key includes

for each key location of the set of at least one key location corresponding to that virtual key, determining a parameter relating the touch location and that key location; and

processing the determined parameters for each of the set of at least one key location corresponding to that virtual key to determine the parameter for that virtual key.

34. The computer-readable medium of claim 33, wherein:

the determined parameter for each virtual key is an average of the determined parameters for the set of at least one key location corresponding to that virtual key.

35. The computer-readable medium of claim 33, wherein:

for each key location, the determined parameter relating the touch location and that key location is an indication of the physical distance between the touch location and that key location.

36. The computer-readable medium of claim 34, wherein:

for each key location, the determined parameter relating the touch location and that key location is an indication of the physical distance between the touch location and that key location.

37. The computer-readable medium of claim 34, wherein:

the parameter for each virtual key is an average of the determined parameters for the set at least one key

location corresponding to that virtual key, weighted to account for a relative size of that virtual key.

38. The computer-readable medium of claim 33, wherein:

for each of at least one of the plurality of virtual keys, at least one of the set of key locations corresponding to that virtual key is a touch location determined previously to be intended to activate that virtual key.

39. The computer-readable medium of claim 32, wherein:

determining a parameter for each virtual key includes accounting for a relative size of that virtual key.

40. The computer-readable medium of claim 32, wherein:

determining a parameter for each virtual key includes heuristic considerations for that virtual key.

41. The computer-readable medium of claim 40, wherein:

the heuristic considerations include considering the meaning of collective input to the touch screen.

42. The computer-readable medium of claim 41, wherein:

considering the collective input includes matching the collective input to a dictionary.

43. The computer-readable medium of claim 41, wherein:

considering the collective input includes considering a likelihood of occurrence of sequences of input.

44. The computer-readable medium of claim 35, wherein:

determining from the determined parameters the virtual key for which the determined parameter indicates the highest likelihood includes determining for which virtual key the determined parameter indicates the smallest physical distance.

45. The computer-readable medium of claim 36, wherein:

determining from the determined parameters the virtual key for which the determined parameter indicates the highest likelihood includes determining for which virtual key the determined parameter indicates the smallest physical distance.

46. The computer-readable medium of claim 37, wherein:

for each key location, the determined parameter relating the touch location and that key location is an indication of the physical distance between the touch location and that key location.

47. The computer-readable medium of claim 36, wherein:

determining from the determined parameters the virtual key for which the determined parameter indicates the highest likelihood includes determining for which virtual key the determined parameter indicates the smallest physical distance.

48. The computer-readable medium of claim 31, further comprising:

initially determining at least some of the key locations.

49. The computer-readable medium of claim 39, wherein:

the step of initially determining at least some of the key locations includes, for each of the at least some of the key locations, setting that key location to be a touch location.