What is claimed is:

1. An apparatus, comprising:

a memory; and

a processor operatively coupled to the memory, the processor configured to receive a first event defined by a compute device from a plurality of compute devices implementing a distributed database,

the processor configured to identify a consensus order of the first event with respect to a plurality of events based on a consensus protocol using a relationship of the first event to a set of descendant events of the first event,

the processor configured to store in the memory the consensus order of the first event with respect to the plurality of events,

the processor configured to calculate a state value associated with events associated with the consensus order,

the processor configured to define a second event including the state value to notify other compute devices from the plurality of compute devices of the consensus order.

2. The apparatus of claim 1, wherein:

the processor is configured to receive the first event at a first time,

the processor is configured to receive each descendant event from the set of descendant events during a time period after the first time, each descendant event from the set of descendant events being linked to the first event, and

the processor is configured to identify the consensus order of the first event with respect to the plurality of events at a second time after the time period.

3. The apparatus of claim 1, wherein the processor is configured to receive the first event at a first time, the processor configured to identify a partial order of the first event at a second time after the first time, the processor configured to identify the consensus order of the first event at a third time after the second time.

4. The apparatus of claim 1, wherein each descendant event from the set of descendant events is from a set of famous events for a common round of the consensus protocol, a number of descendant events in the set of descendant events meeting a criterion defined based on a number of events in the set of famous events for the common round.

5. The apparatus of claim 1, wherein each descendant event from the set of descendant events is from a set of famous events for a first round of the consensus protocol,

a famous event from the set of famous events being identified as famous based on a number of events from a second round of the consensus protocol voting that the famous event is famous meeting a criterion, each event from the number of events from the second round being a descendant of the famous event.

6. The apparatus of claim 1, wherein the processor is configured to receive the first event based on a synchronization process with the compute device from the plurality of compute devices, the processor configured to identify a set of events to send to the compute device as part of the synchronization process based on a directed acyclic graph (DAG) associated with the processor.

7. The apparatus of claim 1, wherein

the processor is configured to digitally sign the state value, the processor configured to confirm the state value based on a threshold number of compute devices from the plurality of compute devices digitally signing the state value.

8. The apparatus of claim 1, wherein each event from the plurality of events includes an identifier of a plurality of ancestor events for that event, the processor configured to define a directed acyclic graph (DAG) based on the plurality of events and the plurality of ancestor events for each event from the plurality of events.

9. A non-transitory processor-readable medium storing code representing instructions to be executed by a processor, the code comprising code to cause the processor to:

receive, at a first time, a first event defined by a compute device from a plurality of compute devices implementing a distributed database;

update, based on the first event, a directed acyclic graph (DAG) including a representation of a plurality of events;

define a partial order of the first event with respect to the plurality of events based on the DAG;

receive a set of events during a time period after the first time;

identify, at a second time after the time period, a consensus order of the first event with respect to the plurality of events based on the partial order and a consensus protocol using a relationship of the first event to each event from the set of events;

store in a memory the consensus order of the first event with respect to the plurality of events;

calculate a state value associated with events associated with the consensus order; and

define a second event including the state value to notify compute devices from the plurality of compute devices of the consensus order.

10. The non-transitory processor-readable medium of claim 9, wherein each event from the plurality of events includes an identifier of a plurality of ancestor events for that event, the method further comprising:

defining the DAG based on the plurality of events and the plurality of ancestor events for each event from the plurality of events.

11. The non-transitory processor-readable medium of claim 9, wherein each event from the set of events is a descendant of the first event.

12. The non-transitory processor-readable medium of claim 9, wherein each event from the set of events is a famous event for a common round of the consensus protocol, a number of events in the set of events that are also descendants of the first event meeting a criterion defined based on a total number of events in the set of events.

13. The non-transitory processor-readable medium of claim 9, wherein each event from the set of events is a famous event for a first round of the consensus protocol,

a famous event from the set of events being identified as famous based on a number of events from a second round of the consensus protocol voting that the famous event is famous meeting a criterion, each event from the number of events from the second round being a descendant of the famous event.

14. The non-transitory processor-readable medium of claim 9, the code further comprising code to cause the processor to:

digitally sign the state value; and

confirm the state value based on a threshold number of compute devices from the plurality of compute devices digitally signing the state value.

15. A method, comprising:

receiving, at a first compute device from a plurality of compute devices that implements a distributed database and based on a synchronization process with a second compute device from the plurality of compute devices, a first event;

updating, based on the first event, a directed acyclic graph (DAG) including a representation of a plurality of events;

identifying, based on the DAG, a set of events to send to the second compute device as part of the synchronization process;

sending the set of events to the second compute device;

identifying a consensus order of the first event with respect to the plurality of events based on a consensus protocol and the DAG;

storing in a memory the consensus order of the first event with respect to the plurality of events;

calculating a state value associated with events associated with the consensus order; and

defining a second event including the state value to notify compute devices from the plurality of compute devices of the consensus order.

16. The method of claim 15, wherein the identifying the consensus order of the first event includes identifying the consensus order of the first event with respect to the plurality of events based on a relationship of the first event to a set of descendant events of the first event.

17. The method of claim 15, further comprising:

ceasing to send the set of events to the second compute device when a criterion associated with the sending the set of events is met.

18. The method of claim 15, wherein each event from the plurality of events includes an identifier of a plurality of ancestor events for that event, the method further comprising:

defining the DAG based on the plurality of events and the plurality of ancestor events for each event from the plurality of events.

19. The method of claim 15, wherein the receiving the first event includes receiving the first event at a first time, the method further comprising:

identifying a partial order of the first event at a second time after the first time, the identifying the consensus order of the first event being at a third time after the second time.

20. The method of claim 15, wherein the set of events is a first set of events, the identifying the consensus order of the first event includes identifying the consensus order of the first event with respect to the plurality of events based on a relationship of the first event to a second set of events,

each event from the second set of events is a famous event for a common round of the consensus protocol, a number of events in the second set of events that are also descendants of the first event meeting a criterion defined based on a total number of events in the second set of events.

21. The method of claim 15, wherein the identifying the consensus order of the first event includes identifying the consensus order of the first event with respect to the plurality of events based on a relationship of the first event to a set of famous events for a first round of the consensus protocol,

a famous event from the set of famous events being identified as famous based on a number of events from a second round of the consensus protocol voting that the famous event is famous meeting a criterion, each event from the number of events from the second round being a descendant of the famous event.