

CLAIMS:

What is claimed is:

1. A computer implemented method for model based traceability, the computer implemented method comprising:
 providing a traceability model;
 creating a plurality of traceability links based on the traceability model; and
 providing a tool for managing the plurality of traceability links.
2. The computer implemented method of claim 1, wherein the traceability model comprises a plurality of tables that form a schema.
3. The computer implemented method of claim 2, wherein the plurality of tables comprise an artifact table, a traceability link type table, and a traceability links table.
4. The computer implemented method of claim 3, wherein the traceability link type table defines a plurality of traceability types comprising artifact-to-artifact links, model-to-model links, model-to-code links, and artifact-to-model/code links.
5. The computer implemented method of claim 1, wherein creating a plurality of traceability links comprises:
 receiving traceability information;
 creating an artifact table based on the model and the traceability information;

creating a traceability link type table based on the model and the traceability information; and

creating a traceability links table based on the model and the traceability information, wherein the traceability links table references the artifact table for a source and a target for each traceability link in the traceability links table and references the traceability link type table for a traceability type for each traceability link in the traceability links table.

6. The computer implemented method of claim 5, wherein each entry of the traceability links table identifies for a given traceability link an identifier, a source artifact, a target artifact, and a traceability type.

7. The computer implemented method of claim 6, wherein each entry of the traceability links table further identifies for the given traceability link an originator, a time stamp, whether the given traceability link is suspect, or whether the given traceability link is valid.

8. The computer implemented method of claim 1, further comprising:

responsive to selection of a given traceability link, presenting artifact information for the given traceability link.

9. The computer implemented method of claim 1, further comprising:

receiving a traceability links query;
identifying a set of traceability links that satisfy the traceability links query; and
presenting the set of traceability links.

10. The computer implemented method of claim 9, further comprising:

identifying a suspect traceability link within the set of traceability links; and

presenting a suspect link identifier in association with the suspect traceability link.

11. A traceability system comprising:

an application module;

a model framework, wherein the model framework provides a traceability model;

an application programming interface, wherein the application programming interface exposes the traceability model to the application module; and

a database,

wherein the application module creates a plurality of traceability links based on the traceability model and provides a tool for managing the plurality of traceability links, and wherein the database stores the plurality of traceability links.

12. The traceability system of claim 11, wherein the application module is a client application, an application plugin to an integrated development environment, or a server application.

13. The traceability system of claim 11, wherein the database stores artifacts for generated by the application module.

14. A computer program product for model based traceability, the computer program product comprising:

a computer usable medium having computer usable program code, the computer usable program code comprising:

computer usable program code configured to provide a traceability model;

computer usable program code configured to create a plurality of traceability links based on the traceability model; and

computer usable program code configured to provide a tool for managing the plurality of traceability links.

15. The computer program product of claim 14, wherein the traceability model comprises a plurality of tables that form a schema.

16. The computer program product of claim 15, wherein the plurality of tables comprise an artifact table, a traceability link type table, and a traceability links table.

17. The computer program product of claim 14, wherein the computer usable program code configured to create a plurality of traceability links comprises:

computer usable program code configured to receive traceability information;

computer usable program code configured to create an artifact table based on the model and the traceability information;

computer usable program code configured to create a traceability link type table based on the model and the traceability information; and

computer usable program code configured to create a traceability links table based on the model and the

traceability information, wherein the traceability links table is references the artifact table for a source and a target for each traceability link in the traceability links table and references the traceability link type table for a traceability type for each traceability link in the traceability links table.

18. The computer program product of claim 17, wherein each entry of the traceability links table identifies for a given traceability link an identifier, a source artifact, a target artifact, and a traceability type.

19. The computer program product of claim 14, further comprising:

computer usable program code configured to present artifact information for the given traceability link responsive to selection of a given traceability link.

20. The computer program product of claim 14, further comprising:

computer usable program code configured to receive a traceability links query;

computer usable program code configured to identify a set of traceability links that satisfy the traceability links query; and

computer usable program code configured to present the set of traceability links.