

WEB-BASED MAINTENANCE AS DECISION SUPPORT FOR PREVENTIVE MAINTENANCE

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BACKGROUND



Maintenance need to be done properly

There's some companies who still using conventional paper process to transferring data or information

The Process of storing, transferring and searching data, need to be faster and more efficient



PROBLEMS & OBJECTIVES



■ Problems

- How to do preventive maintenance on critical component?
- How to design decision support system for preventive maintenance?

■ Objectives

- Give the recommendation to do the preventive maintenance.
- Design web-based maintenance as the decision support for preventive maintenance.



RESEARCH LIMITATION & BENEFITS



■ Limitation

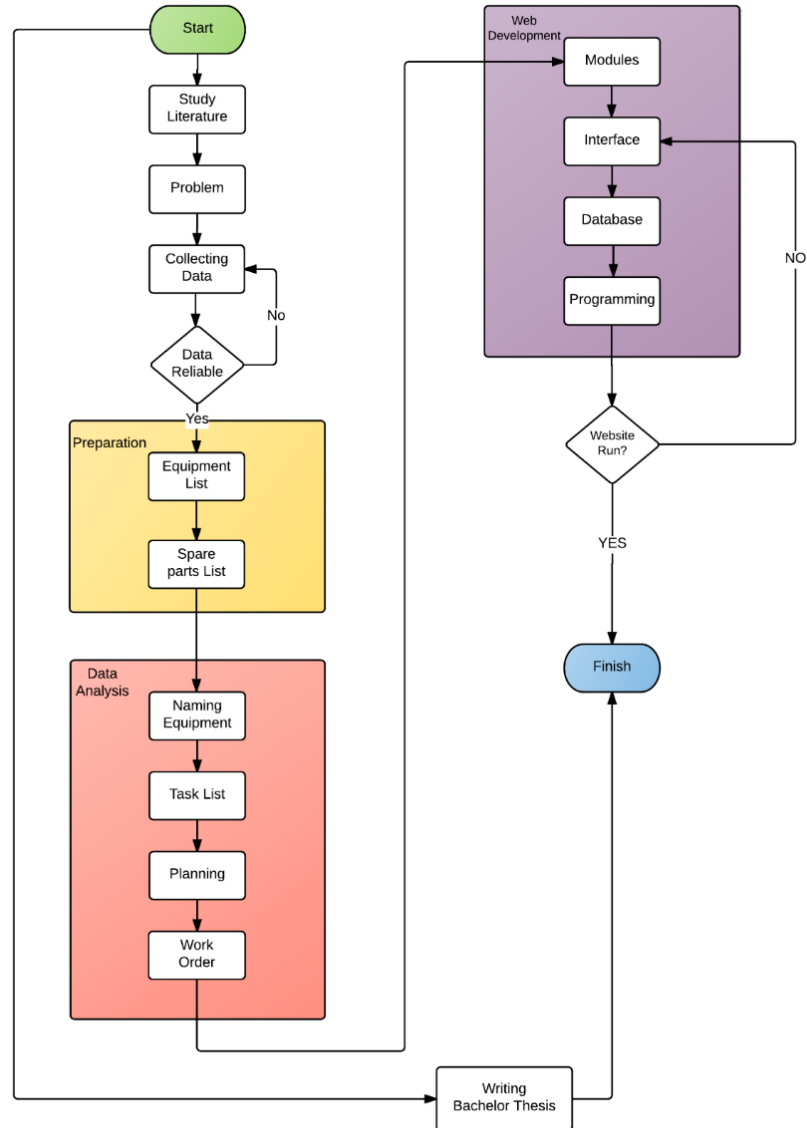
- Critical component that could disturb operational of the ship.
- This research based on the data that given by PT.Tanto Intim Line
- Not all the specific component will be examining in this research.
- The design of decision support system for preventive maintenance will be using macromedia dreamweaver for web interface, and MySQL for the database.

■ Benefits

- To help shipping company to apply preventive maintenance, so the availability of the shipping company asset can be increase.
- With the decision support system for preventive maintenance, it can help the company at maintenance management process and the decision maker for the maintenance activity

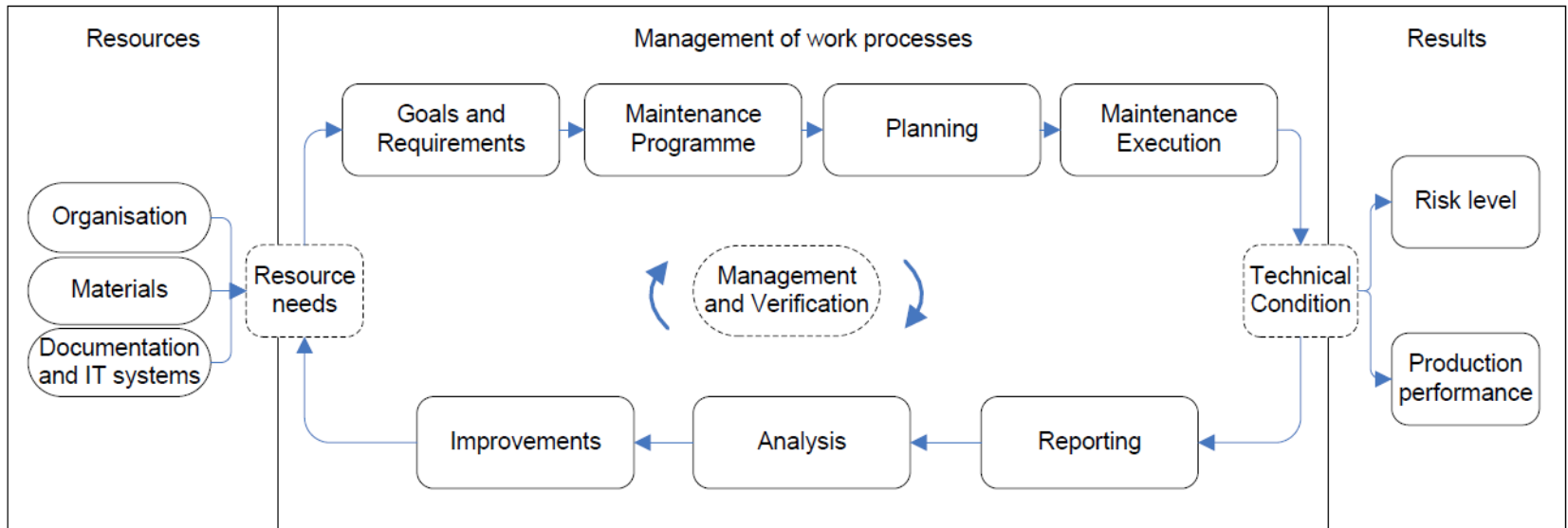


METHODOLOGY





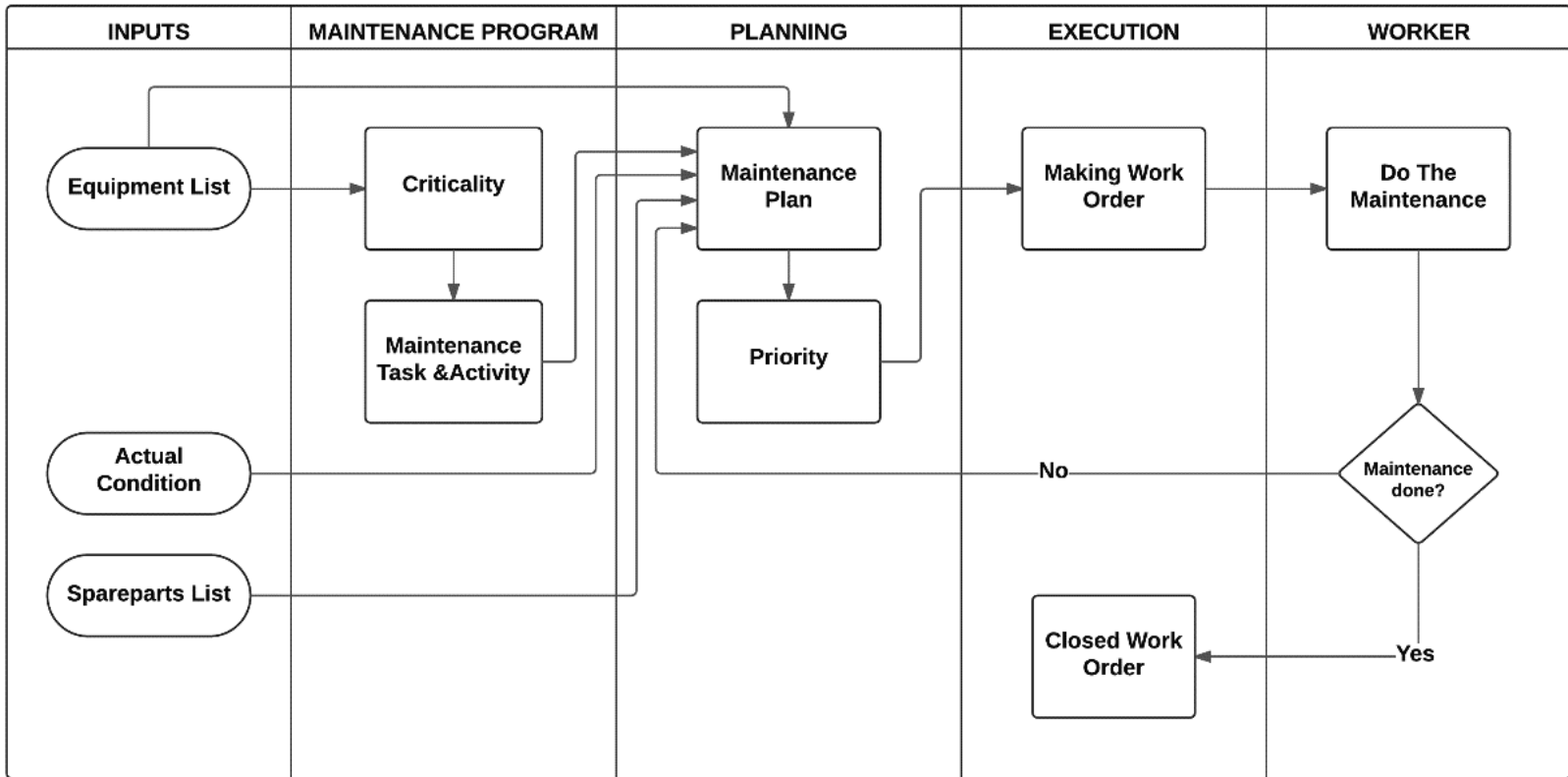
MAINTENANCE MANAGEMENT WORK PROCESS



NORSOK STANDARD Z-008



WORK FLOW & WORK INFORMATION





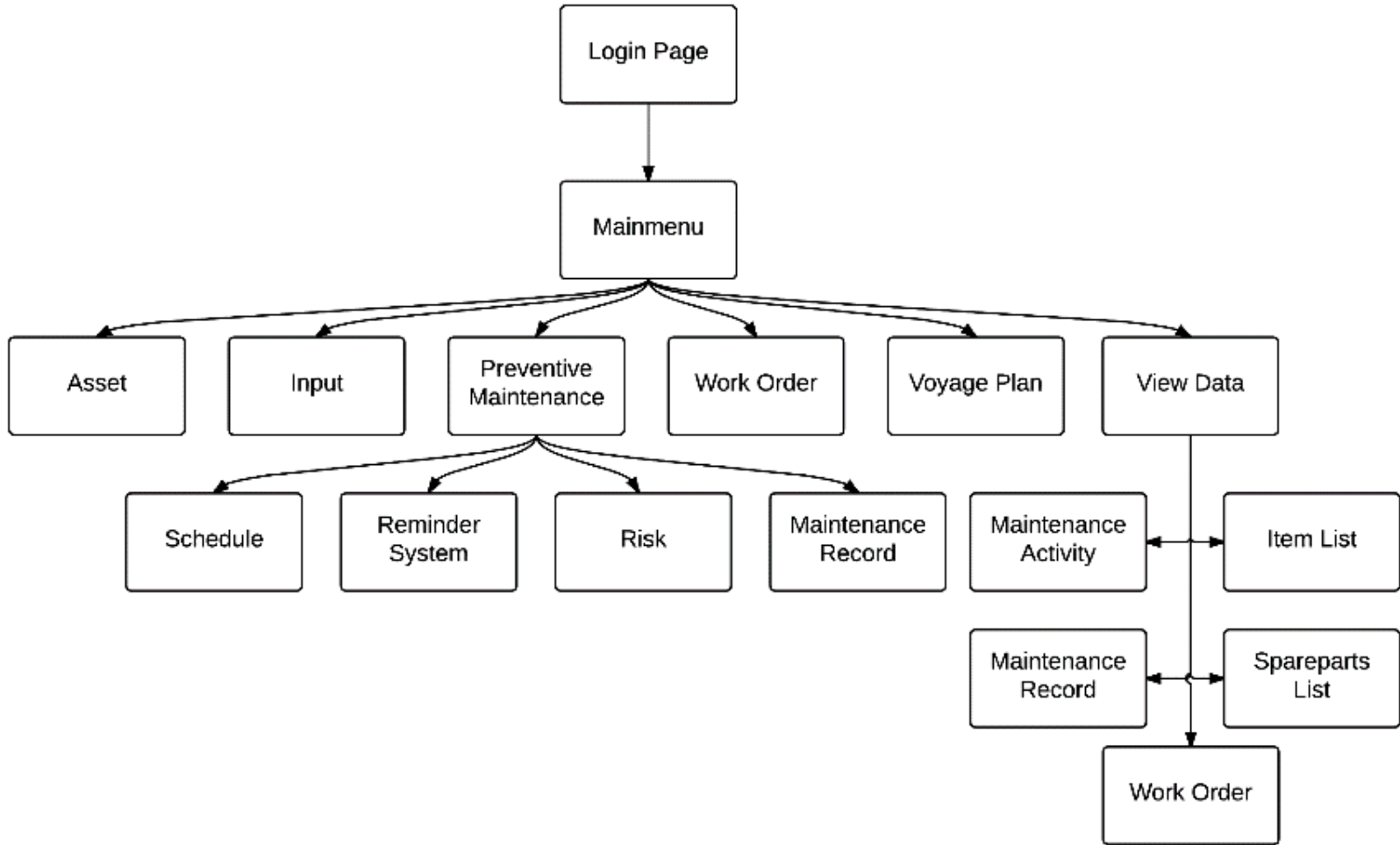
WEB FEATURES



- The modules for the web will be referenced from the several existing maintenance management application. The modules that will be created on this web-based maintenance are:
 - Manage equipment and maintenance activity.
 - Manage spare part quantity.
 - Record all of the breakdown equipment time.
 - Keep running hour of each equipment
 - Help decision making on maintenance, based on when the next stop of the ship and risk level.
 - Digital form of work order.
 - Maintenance Reminder System.

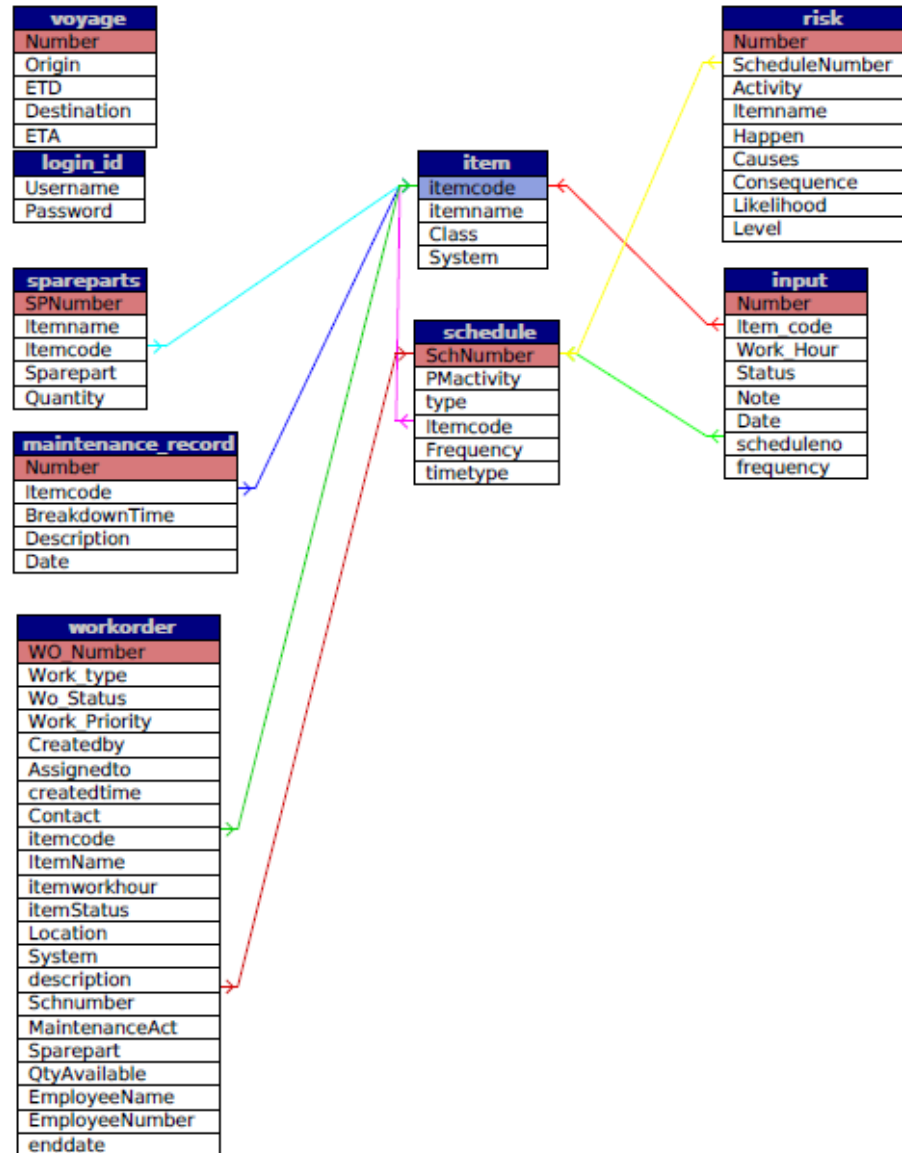


WEB STRUCTURE





DATABASE SCHEMA





CONCLUSION



- Web based maintenance provide the maintenance frequency with reminder system to make sure the maintenance can be held on the right time, so the overlapping maintenance time can be avoided.
- To design decision support, the web based maintenance featured with reminder system that combined with voyage plan and work hour to make a recommendation when the maintenance time comes. To help decision making, there is a risk level and the consequence of each maintenance activity if the component fail.



SUGGESTION



- Need to add more features to make web based maintenance not only for maintenance purpose but also can connect with the another aspect of the ship and its company. Because maintenance will be the crucial aspect not only for the maintenance itself but also for the different aspect of the company.
- Need to develop with another programming language beside of PHP and HTML, to make the web more alive and easier to be accessed.

This is The end of The Presentation

Thank You



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