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ABSTRACT

Ergonomic professionals have a need to progress from paper to technology in order to save time and increase productivity. In this digital age of time technology, including mobile devices, in the work environment is essential to making a product better. A good comprehensible, anesthetically pleasing, efficient interface should be used to minimize complexity for the user. The American Industrial Hygiene Association (AIHA) Tool Kit was created so that users with a range of experience in ergonomic analysis would be able to employ it to analyze task in a workplace for a variety of ergonomic risk factors. Improving the design and implementing a simple, anesthetic interface for mobile computing in our program, will allow the ergonomics useful success in the work place.

The Tool Kit is comprised of 20 ergonomic assessment tools that can be used to analyze jobs for a variety of ergonomic risk factors. We have created the ERGOeasy project to better assist the ergonomic specialist in selecting which tool to use for risk assessment based on a given scenario. Our aim is to improve the current interface on the program that we have created.

INTRODUCTION

- A major problem in a workplace is that employees run the risk of getting hurt or being seriously injured.
- According to the us depart of labor there is an estimated \$1 billion dollars per week for worker's compensation cost.
- One goal is to empower employees by advancing the ergonomics process.
- By improving the user interface of ERGOeasy, our program will be more efficient, effective, and simpler to use.

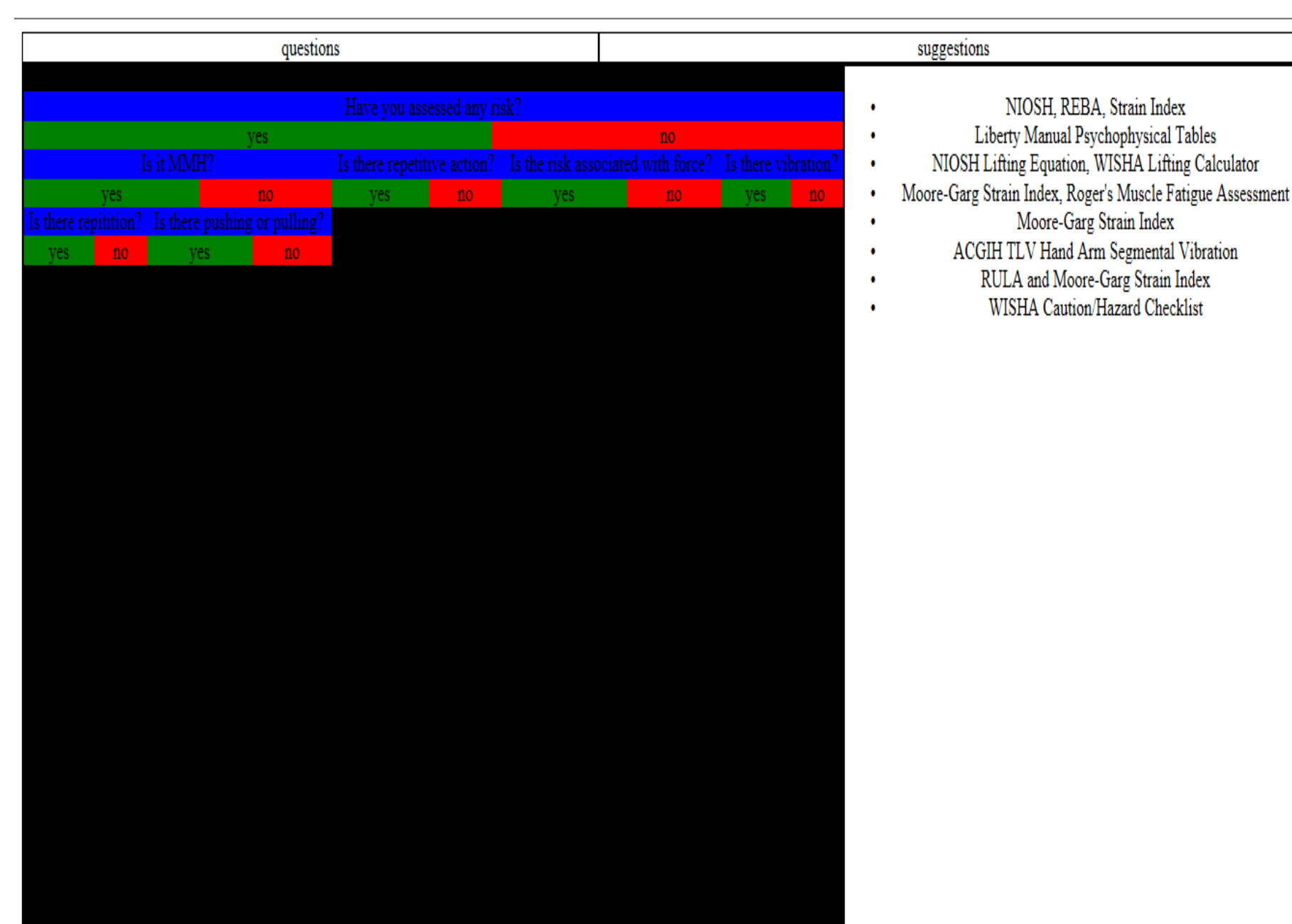


BACKGROUND

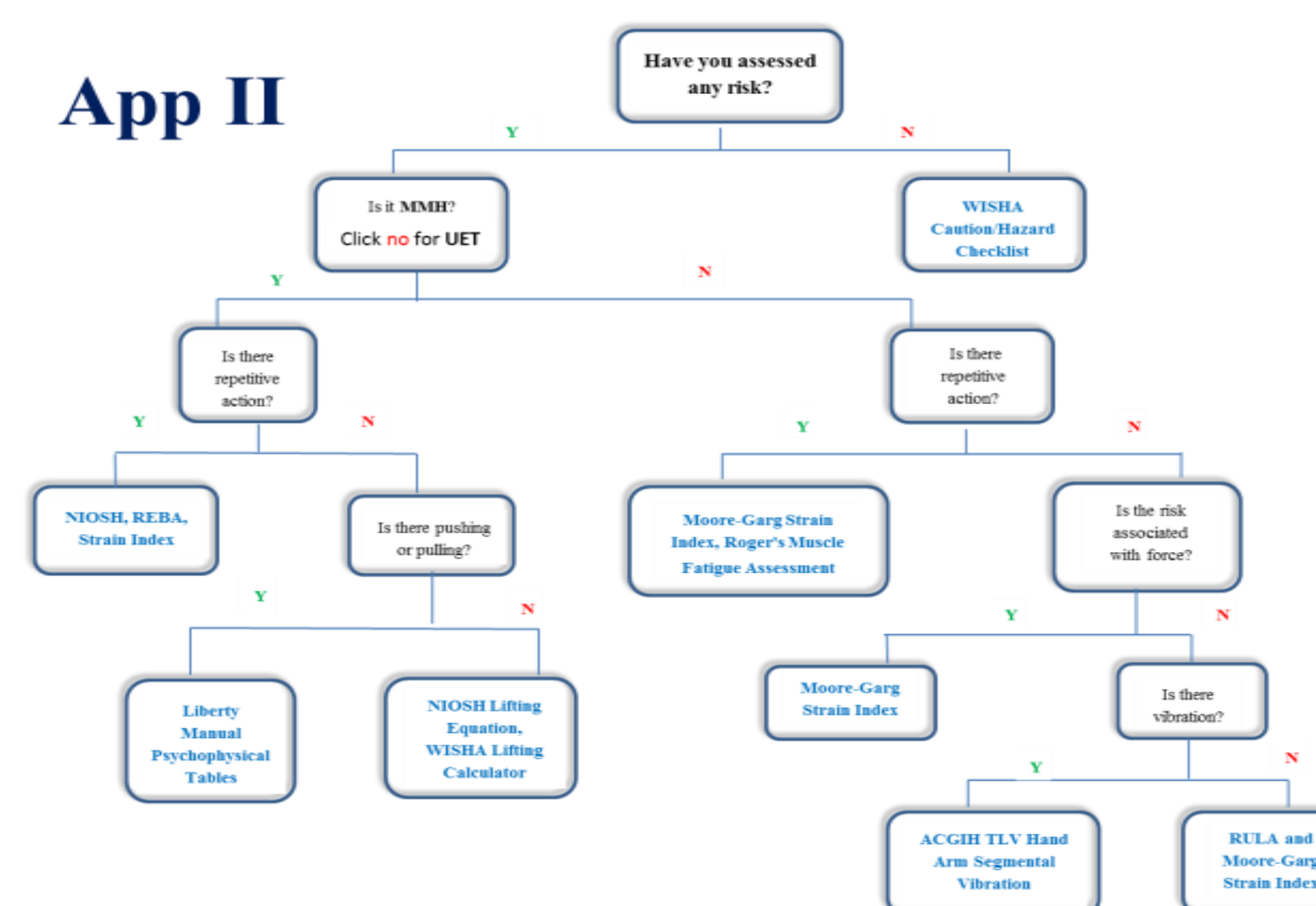
Researchers and developers in the field have accumulated and established these basic principles for good HCI designs in hopes of achieving some of the main objectives.

- Know Thy User
- Understand the Task
- Reduce Memory Load
- Strive for Consistency
- Remind Users and Refresh Their Memory
- Prevent Errors/Reversal of Action
- Naturalness

IMPLEMENTATION



JavaScript Wireframe

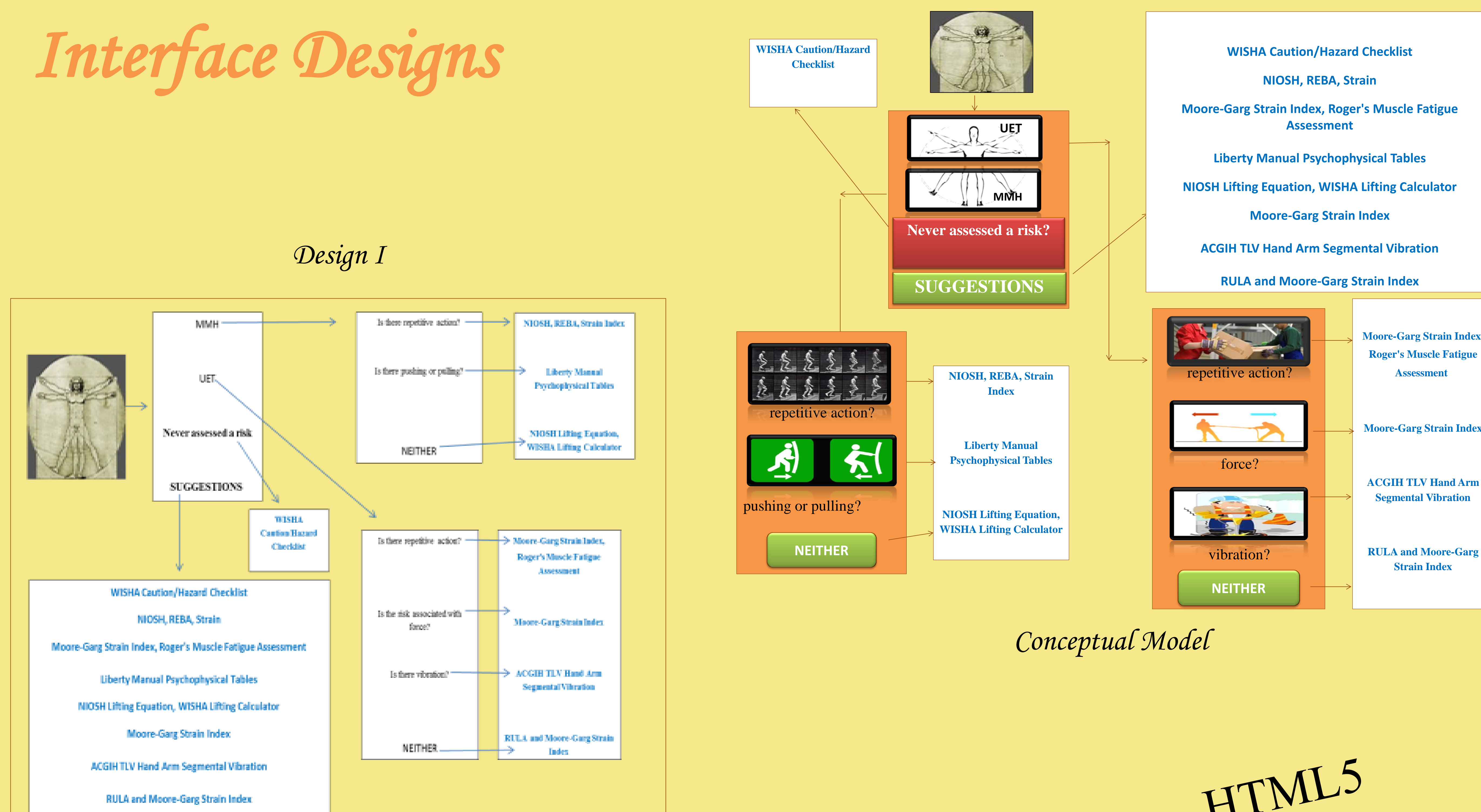


Flowchart

CONCLUSION

Today's smart phones provide the same computing power and similar capabilities as the PCs of a decade ago. Therefore it is wise to provide applications for hand held devices. The focus of this research has been on improving the app interface design for human-computer interaction. I believe that the conceptual model is one of the most important aspects of a user interface. Therefore it is very important that the conceptual model is complete and consistent. Using an elegant design will set your app apart. By reducing the complexity of our ERGO code, we have been able to make the program simpler, which makes it run more efficiently and look more aesthetically pleasing.

Interface Designs



Conceptual Model

HTML5

FUTURE WORK

- iOS app
- Android app

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