LIFTSY

**Abstract:** Worker safety is a serious issue that many workers face today, especially those who do repetitive work. In ISE 120, Work Methods and Design Measurement, the NIOSH equation was utilized to determine when a task was dangerous. Liftsy is an application designed to analyze the safety of lifting tasks and prevent manual labor related injuries using algorithms to determine a lifting index.

**1.0 Objectives**

**1.1** To make the process for calculating the Lifting Index for tasks simple and user friendly.

**1.2** To help people determine if the tasks they are doing are physically harmful to them.

**1.3** Promote safe and healthy workplaces through recommendations on how to make make tasks safer.

**2.0 Requirements Specifications**

**2.1 Functional Requirements**

**2.1.1** A user shall be able to create an account & log into Liftsy.

**2.1.2** A user shall be able to find out more info on Lifting Index & NIOSH equation from Liftsy.

**2.1.3** A user can enter every value for each NIOSH lifting variable.

**2.1.4** The application will store results in database for future user access.

**2.2 Nonfunctional Requirements**

**2.2.1** Angular JS will be used for system implementation.

**2.2.2** Front end will be implemented in javascript/html.

**2.2.3** Database will be created for user login information.

**2.2.4** Database will be created for saved results.

**2.2.5** Google Firebase will be used for building prototype.