Program Design Document Spring, 2017

Adam Risher

CS155 – Section 01

Project #2 – Save the Date

Due: Tuesday, February 6, 2017

**Program Requirements:**

This program will convert a date entered in ISO 8601 format and convert it to the US date format.

**Program Inputs:**

Date in ISO 8601 format (integer)

The integer value must be non-negative and consist of 8 digits.

**Program Outputs:**

The year (integer), month (integer) and day (integer)

**Solution Overview:**

The program will begin by having the user enter a date in ISO 8601 format, YYYYMMDD.

Loop to compute length dividing ISO date by 10 and incrementing a length variable.

Compute year = ISO date / 10000

ISO date will be trimmed on the year

ISO date = ISO date % 10000

Compute month = ISO date / 100

ISO date will be trimmed of the month

ISO date = ISO date % 100

Compute day = ISO date / 1

Once the day, month and year are computed they will be output to the screen with a “/” between them.

**Algorithm Flowchart:**



**Test Plan:**

Three test cases will be run:

1. ISO Date input of 20171216
2. ISO Date input of 17000331
3. ISO Date input of 10000101
4. ISO Date input of 45010418