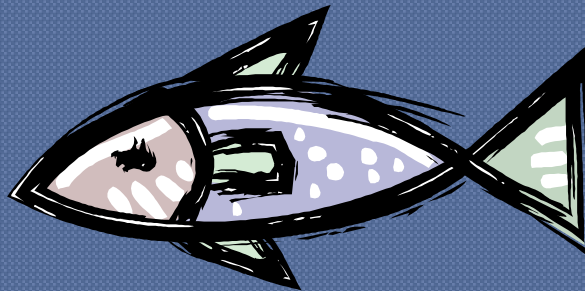


Electronic Field Input System

Team 5

Stacy Carlson, Thomas Flores, and Ralph Parkison



The Problem

- ◉ Paper forms submitted via mail
 - Potential for loss
 - Errors during transcription
 - Long time to access the data



2/8/05

Franklin D. Roosevelt Lake Creel Survey Form

| Date (mm/dd/yy) | | | | Survey Type | | | | Creel Clerk Initials | | | | | | | | | | | | | |
|-------------------|----------|---------|------------|--------------|----------------|-------------|------------|----------------------|---------------|---------|------------------|------------------|----------------|-----------------|-------------------|------------|----------------|------|----------|-----------|-------------|
| 052414 | | | | 1 | | | | J E M | | | | | | | | | | | | | |
| Weekday | | | | Start Work | | | | Finish Work | | | | | | | | | | | | | |
| 6 | | | | 0700 | | | | 2100 | | | | | | | | | | | | | |
| Section | | | | Start Creel | | | | Finish Creel | | | | | | | | | | | | | |
| 1 | | | | 1000 | | | | 2000 | | | | | | | | | | | | | |
| Total hours Creel | | | | | | | | | | | | 10.0 | | | | | | | | | |
| Comment # | Location | Party # | Party Size | Time Checked | No. of Anglers | Angler Type | Start Time | End Time | Complete Trip | Zipcode | Target Species 1 | Target Species 2 | Species Caught | Released / Kept | Total Length (mm) | Weight (g) | Species Origin | Mark | Fin Clip | Tag Color | Tag Number |
| 4 | | 3 | 1330 | 2 | 1 | 0630 | 1315 | 1 | 99206 | 3 | 0 | 3 | 1/15 | EST. 380 mm | 2 | 0 | 0 | 0 | | | |
| | | | | | 1 | 0630 | 1315 | 1 | 99206 | 3 | 0 | 3 | 1/15 | EST. 385 mm | 2 | 0 | 0 | 0 | | | |
| | | | | | 1 | 0630 | 1315 | 1 | 99206 | 3 | 0 | 3 | 1/10 | EST. 380 mm | 2 | 0 | 0 | 0 | | | |
| 5 | | 3 | 1340 | 3 | 1 | 0700 | 1320 | 1 | 99206 | 3 | 0 | 3 | 1/8 | EST. 370 mm | 2 | 0 | 0 | 0 | | | |
| | | | | | 1 | 0700 | 1320 | 1 | 99206 | 3 | 0 | 3 | 1/8 | EST. 380 mm | 2 | 0 | 0 | 0 | | | |
| | | | | | 1 | 0700 | 1320 | 1 | 99206 | 3 | 0 | 3 | 1/8 | EST. 385 mm | 2 | 0 | 0 | 0 | | | |
| 5 | | 2 | 1410 | 2 | 1 | 0700 | 1350 | 1 | 99141 | 3 | 0 | 3 | 0/7 | | | | 0 | 0 | 0 | 0 | No. P.R. 24 |
| | | | | | 1 | 0700 | 1350 | 2 | 99141 | 3 | 0 | 3 | 0/12 | | | | 0 | 0 | 0 | 0 | |
| | | 3 | 1520 | | 1 | 0800 | 1510 | 1 | 99109 | 3 | 0 | 3 | 1/3 | EST. 296 | 2 | 0 | 0 | 0 | | | |
| | | | | | 1 | 0800 | 1510 | 1 | 99109 | 3 | 0 | 3 | 1/3 | EST. 385 | 2 | 0 | 0 | 0 | | | |
| | | | | | 1 | 0800 | 1510 | 1 | 99109 | 3 | 0 | 3 | 1/3 | EST. 370 | 2 | 0 | 0 | 0 | | | |
| 6 | | 2 | 1650 | 2 | 1 | 0700 | 1510 | 1 | 99141 | 3 | 0 | 3 | 1 | 395 | 505 | 2 | 0 | 0 | 0 | | |
| | | | | | 1 | 0700 | 1510 | 1 | 99141 | 3 | 0 | 3 | 1 | 385 | 465 | 2 | 0 | 0 | 0 | | |
| | | | | | | | | | | | | 3 | 1 | 422 | 640 | 2 | 0 | 0 | 0 | | |
| | | | | | | | | | | | | 3 | 1 | 382 | 465 | 2 | 0 | 0 | 0 | | |
| | | | | | | | | | | | | 3 | 1 | 425 | 590 | 2 | 0 | 0 | 0 | | |
| | | | | | | | | | | | | 3 | 1 | 412 | 545 | 2 | 0 | 0 | 0 | | |
| 5 | | 2 | 1640 | 2 | 1 | 0800 | 1620 | 1 | 99206 | 3 | 0 | 3 | 1 | 395 | 500 | 2 | 0 | 0 | 0 | | |
| | | | | | 1 | 0800 | 1620 | 1 | 99206 | 3 | 0 | 3 | 1 | 390 | 490 | 2 | 0 | 0 | 0 | | |
| | | | | | | | | | | | | 7 | 1 | 380 | 435 | 2 | 0 | 0 | 0 | | |
| | | | | | | | | | | | | 3 | 1 | 390 | 485 | 2 | 0 | 0 | 0 | | |
| | | | | | | | | | | | | 3 | 1/10 | EST. 387mm | 2 | 0 | 0 | 0 | | | |

Notes:

estimate 1 (122)

Client Requirements

- ◉ Electronic Input System

- Creel (Top priority)
- Raw Fish
- FWIN

- ◉ Easily updatable/maintainable

- Study needs change over time

- ◉ Fully functional with Database

- ◉ Solution can't depend on an Internet connection

End User

◉ Creel Clerk

- Two types
 - Stationary
 - Bus Route
- Trained how to do Creel survey
- Varying computer skills



Operating Environment

◉ Getac Tablet

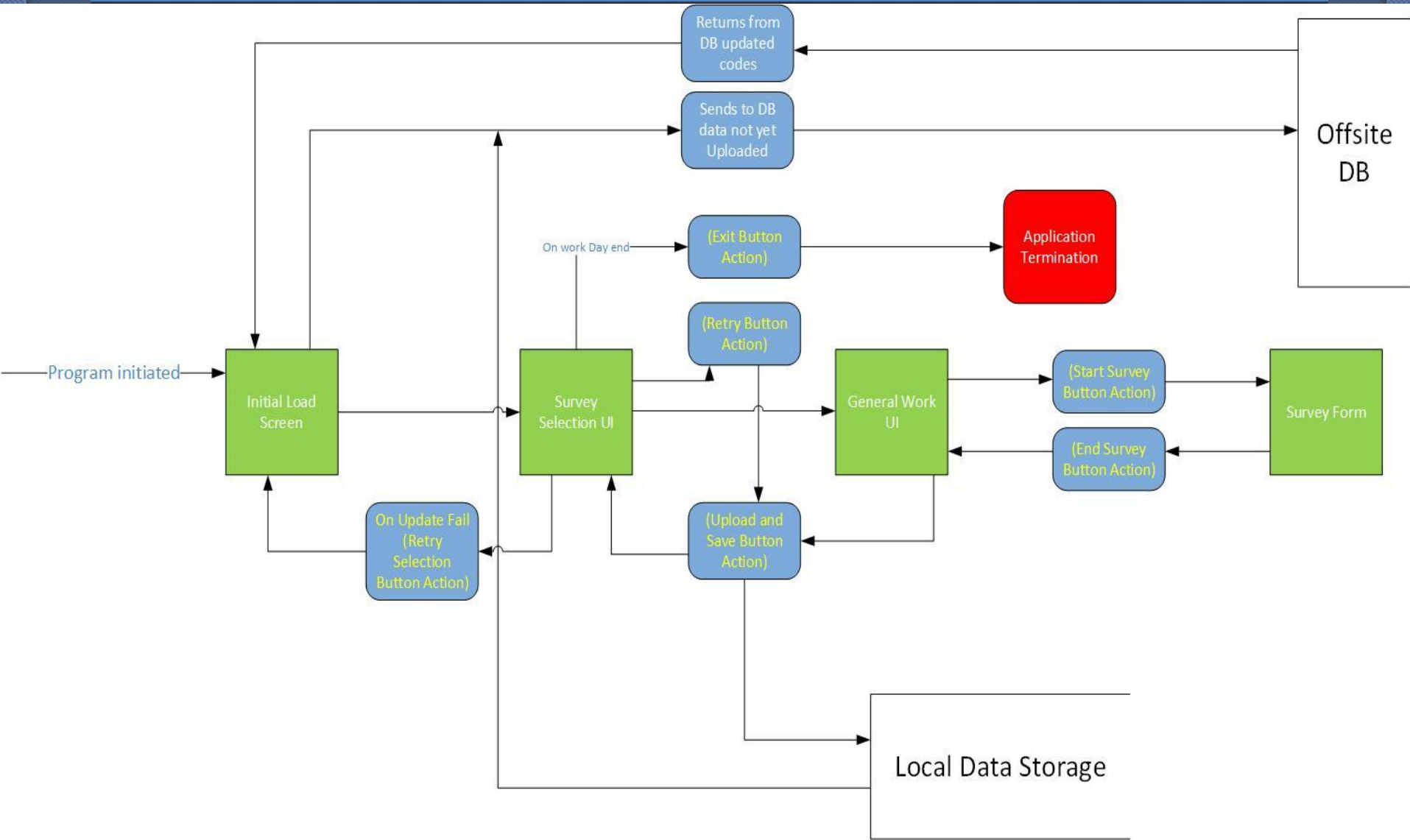
- Windows 7 Professional (64 bit)
- Stylus/On screen keyboard



Specifications

- ◉ Windows Application written in C#
- ◉ Store data locally in log files
- ◉ Interact with Database via JSON

Overview of the System



User Interface Mockups

Franklin D. Roosevelt Lake Survey System

What Would You Like To Do?



Unreported Surveys: 3

Tuesday 10/14/2014

Survey Type

Bus

Section

Upper

Work Day Start

Start

Work Day End

End

Tuesday 10/14/2014

Survey Type

Bus

Section

Upper

Work Day Start

8:06

Work Day End

End

Location

Start

End

Parties

Fish

Bus Route 94

8:05

8:55

4

37

Bus Route 95

9:37

10:19

7

31

Bus Route 96

10:53

11:45

2

6

Bus Route 97

12:13

13:08

10

53

Start New Location

Creel Survey #5

Creel Survey Start

8:06

Location

3

Creel Survey End

14:37



Party #3



Party
Size

2

No. of
Anglers

2

Angler
Type

Boat

Start
Time

6:30

End
Time

13:06

Complete
Trip

Y

N

Zip
Code

99801

Target
Species 1

Rainbow Trout

Target
Species 2

Kokanee Salmon



Fish

New Party

End Survey

5th Location

Location Start Time

8:06

Location

3 - Location Name

Time At Location

0:50

Party #3

| Party Size | No. of Anglers | Angler Type | Start Time | End Time | Complete Trip | Zip Code | Target Species 1 | Target Species 2 | |
|----------------|---------------------------|----------------|------------|---------------------------|---------------------------|---------------------------|------------------|--------------------------|-------|
| 2 | 2 | Boat | 6:30 | 13:06 | <div>Y</div> <div>N</div> | 99801 | Rainbow Trout | Kokanee Salmon | |
| Species Caught | Kept / Released | Total / Length | Weight (g) | Hatchery Origin | Mark / Tag | Fin Clip | Tag Type | Tag Number | Notes |
| Rainbow Trout | <div>K</div> <div>R</div> | 380 mm | 380 | <div>Y</div> <div>N</div> | <div>Y</div> <div>N</div> | <div>Y</div> <div>N</div> | Floy | ABCDEFGHIJ 1234567890 | |
| Kokanee Salmon | <div>K</div> <div>R</div> | 230 mm | 97 | <div>Y</div> <div>N</div> | <div>Y</div> <div>N</div> | <div>Y</div> <div>N</div> | Add-Fin | ABCDEFGHIJ 1234567890 | |
| Rainbow Trout | <div>K</div> <div>R</div> | 7 | | | | | | | |
| Kokanee Salmon | <div>K</div> <div>R</div> | | | | | | | | |

+ Fish

New Party

End Location

Questions?

