

COMP 4 Project: An Sports Club kit-ordering system

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CONTENTS

1	Analysis	2
1.1	Background to and Identification of the Problem	2
1.2	The Current System	2
1.3	Prospective Users	3
1.4	User Needs and Acceptable Limitations	4
1.5	Data Sources and Destinations	4
1.6	Data Volumes	4
1.7	Analysis Data Dictionary	4
1.8	Data Flow Diagrams	5
1.9	Entity Relationship Models	5
1.10	Entity Description	5
1.11	Objectives for the Proposed System	5
1.12	Feasibility of Potential Solutions	5
1.13	Justification of Chosen Solution	5
2	Design	5
3	Technical Solution	5


1 ANALYSIS

1.1 Background to and Identification of the Problem

The client for this program is Kira, who volunteers as a kit orders organiser for Tilehurst Swimming Club, who asked me to develop a solution for her to be able to organise kit orders more effectively. The relationship my client has with me is that she is my mother.

1.2 The Current System

The current system is paper-based, so people wanting to order kit have to download a form from the club website then fill it in and either hand it in on one a Friday night or email it to the kit email address, which then requires Kira to collate all of these orders in to one before then sending it off to the manufacturers. The kit form is seen here:



Kit Order Form

Name: _____ Date: _____

Squad: _____ Contact email: _____

Item	Quantity	Size	Name on back	Cost
Total Cost:				

Method of payment: Cheque ☐ Cash ☐ BACs ☐

Swim hats are available purchase on a Friday evening at Crosfields.

Orders for other kit can be sent via email to tsckitorders@gmail.com or handed in at Crosfields on a Friday evening. Alternatively the form and payment can be placed in the post box at Crosfields.

Please include order form and payment in an envelope marked 'Kit Orders'.

Orders will be placed in bulk at the beginning of month. You will be notified when your order is ready and when it should be picked up.

Kit Item	Price
TSC polo shirt	£12
TSC poolside shirt	£12
TSC hoodie (over-the-head)	£17
TSC zippy hoodie	£20
TSC holdall	£27
TSC rucksack	£22
TSC hat	£6

This is obviously a very slow system, especially as the orders only get placed once a month, so it can take up to a month to receive kit that has been ordered, and possibly longer if the orders have been forgotten, which has happened far too many times in the past. This also has the problem of wasting a large amount of paper, as the forms are just collated on the computer and then discarded. Yet another problem with this system is that it requires everyone to pay attention to the dates. After the orders have been placed and then received, it requires Kira to email out to all the parents that their kit has been received and then requires her to bring it to a Friday-evening session when the parents are also present, and not all of the members of the squads, especially in the lowest squad swim on Fridays, so it can be a few weeks or months before the swimmers actually get the kit that was ordered. The objective for this project then, is to make a way for parents to order kit and then for Kira to be able to collate this together without hours of data entry.

1.3 Prospective Users

The prospective users of this system will be Kira and then whomever takes over from her when she steps down as Kit Organiser. For this reason, I will need to assume that the users of this system are not tech-savvy, due to the fact that, while I know that Kira knows how to use computers fairly well, I don't know who will be following her so I don't know what their capabilities are regarding computers. For this reason the solution will have to be very simple so that people of any ability can use the system. I also wish to make it so the parents can order kit using a form on the club website, so the forward-facing system will have to be very easy to use, as I don't know all

of the parents so I have to assume that some of them will be tech-illiterate, or at the very least, uncomfortable with computers.

1.4 User Needs and Acceptable Limitations

Kira needs to have a way that she can have the parents order what they want and then have it in a searchable database so that she can just create an email to send to the kit manufacturers once a month. Then when she receives the kit she wants to be able to send out a mass email to the people who have ordered kit the previous month that tells them their kit is ready to be picked up.

1.5 Data Sources and Destinations

The sources of data are the parents ordering kit, by way of the order form and Kira entering the details into a word document. This source will not change with the new system, however it won't be via Kira, it will be automatically added in to a database. In the current system the word document is printed out and then sent off to the kit manufacturer and then Kira receives an email when they are ready for the kit to be picked up. In the new system, the data would again be arranged into a word document and printed out. This is an unfortunate limitation of the kit suppliers, not a problem on the club's end.

1.6 Data Volumes

The volume of data will be very low as the system will work entirely in text, only one person will be accessing the back-end of it, the volume of kit orders is fairly low, although high enough for this to be a problem. Also, this will only be accessed once or twice a month so the data volumes will be kept low. I foresee a volume of a few kB of data per month.

1.7 Analysis Data Dictionary

Table 1: Nonlinear Model Results

Data	Data Type	Description
Name	Text	This is for the name of the recipient of the kit
47	877	230
31	25	415
35	144	2356
45	300	556

- 1.8 Data Flow Diagrams
- 1.9 Entity Relationship Models
- 1.10 Entity Description
- 1.11 Objectives for the Proposed System
- 1.12 Feasibility of Potential Solutions
- 1.13 Justification of Chosen Solution

2 DESIGN

3 TECHNICAL SOLUTION

REFERENCES

- [1] A. J. Figueredo and P. S. A. Wolf. Assortative pairing and life history strategy - a cross-cultural study. *Human Nature*, 20:317–330, 2009.