1. – Investigation

# 2.1 Investigation Methods Used

## Interview

I have chosen to conduct an interview with the assistant coach Peter Martland, as he observes the fencers during the sessions and handles the finances of the club. This interview will be **informal** as I will perform the interview towards the end of one of my fencing sessions. The questions I have chosen to ask are:

* Why do you feel you need this new system?
* What do fencers do currently to set up a duel?
* How many duels a session on average are there for each fencer?
* If you could have any special features for matchmaking, what would they be?
* What sort of things will be recorded on your paper-based system?
* Do you create any backups?
* Are there any security processes in place?
* If you could add any features to your system, what would they be?

These are my pre-made questions, but as the interview progresses and depending on answers given, I may add or remove some questions.

Tuesday Fencing Session – 13/09/16 Interview at end of session: 20:45 to 21:00

Interviewer – Nikesh Patel (N)

Interviewee – Peter Martland (P)

N – Ok Pete, the first thing I wanted to ask you is why you feel you need this new system?

P – Well currently we don’t really have a system, as we let the fencers do their own thing – they have to choose their opponents and generally decide how long they last – though duels average around 10 or 15 points – so the times aren’t too long. This can mean the sessions can get disorganised especially on the busier nights- something we want to get rid of. It would also be nice to have all the parts of the club together on the system, all the contact and financial details coupled with this new matchmaking system.

N – So what causes the disorganisation in the duels?

P- Well some of the guys will always fence the same people every week because they know them etc. and this means some people spend more times on the side-lines than others. We also have some shy people at the club – and they don’t fence as much as the others mainly because they won’t ask others for a duel. If we had a matchmaking system they wouldn’t have to worry about that sort of thing.

N- Ah that makes sense. So what would be the average amount of duels a fencer has a session?

P – Hmm, about 6-8, it tends to vary.

N- Alright nice. Ok so for the new matchmaking system, are there any special features you would like?

P- Urrm, it would be nice to have a challenge mode for the less experienced fencers, as one of the best ways to improve is to fence someone who is better than you – they can give you advice and you can see proper technique in action.

N – Ok I will see what I can do. Now for the financial side of things, I understand you currently have a paper based system for recording payments. Could you tell me a little about that?

P- Sure. The ‘system’ is simple really, each session I write down 3 columns on a piece of paper – two for the fencing type and one for the amount paid.

N – So you write down Epée, Sabre and Amount Paid as your headings?

P – Yeah, and then I just write the names of the people that come down on that day in the fencing type they did and what they paid?

N – So what do you do if they can’t pay for some reason?

P – Well I will just write IOU in the paid column and chase them up on it the next week.

N – How long would you say it would take you to write down all this data in total then?

P – It doesn’t take very long, around five minutes or so.

N – Aright thanks. Another thing I wanted to ask was whether or not you create any backups of your data?

P – No we don’t. \*chuckles\* don’t want to have to sit there for ages and copy up pieces of paper just to also store them in my house – it seems pointless.

N – Fair enough, I see your point. So I’m guessing that you don’t have any security processes then.

P – If you can call putting a folder into a filing cabinet a security process then I guess that would be about it.

N – Haha I guess you can. So what problems are you finding with the current way you do things?

P – Well other than the lack of organised duels, losing the pieces of paper is a problem we have had in the past. It doesn’t happen often and isn’t a major problem but because we use rented halls it’s hard to get lost things back. Another thing I could say is adding up the totals every week manually is annoying.

N – Alright then I have one last question then and that is if you could add any features to your system, computerised or physical, what would they be?

P – Well I guess something to notify us about IOU’s would be nice. Juggling 3 clubs it can be hard to remember that sort of thing off the top of your head. That’s all I can think of right now.

END OF INTERVIEW

### Key Findings / Summary

* No backups are made
* One security process
* The current system has plenty of potential for expansion – as the lack of positive feedback on it proves.
* Data entry only takes around 5 minutes – the new system should match or improve on this.
* User requires a way to be notified about pending IOU’s.
* The system displays common limitations of paper based systems – highlighted in 2.7.
* Matchmaking system needs a ‘challenge mode’
* 6-8 duels a session – this should be the target for the system to allocate per session.

## Observation:

I have decided to conduct an observation of a fencing session to see the current systems in action and gauge the strengths and weaknesses of the both the financial and the fencing side of things. I will do this by sitting in during a session and take notes as to what the staff and fencers do relating to the systems.

Tuesday Fencing Session – 20/09/16 – 19:00 to 21:00 [Listed Time for the club]

18:46 – Pete and Dave arrive at St James’ C.E. High School. They begin to unload their van – the fencing gear is kept in individual bags for individual items. There are 14 bags to retrieve from the van and be placed in the hall.

18:50 to 19:05 – People begin to arrive. Some people have their own gear and bring it in their fencing bags. Others do not own their own gear and will try on and wear the provided gear that was brought in earlier. I can also see that some people are paying the fee straight away as they come in however some people have instead gone to gear up or have a conversation with someone.

19:10 – Everyone has geared up and Dave has called everyone together to practise their footwork. Peter is off the side of the hall and is scribbling down the names of the people who have paid and how much they have given.

19:15 to 19:20 – Footwork practise has finished and some people are helping to put the ‘boxes’ up (the machines that are used to show when a point is scored – via a buzzer and coloured light). There are eight lanes to be set up, split equally between Epée and Sabre. Some people have not quite finished gearing up and are fetching the last pieces they require from the bags. Some people have begun fencing using the boxes that have been set up already.

19:21 – Everyone is now fencing or waiting for a lane to be free in order to fence. There are conversations going on between the coaches and some of the members. I have seen a fencer go up to another and ask whether they would like to fence. They replied with a yes and then pointed at a lane that looked like the duel was coming to a close. For past experience I know there is a skill gap between the fencers, the challenger is a lot newer to fencing than the challenged.

19:30 – Dave is now giving a short lesson in technique to one of the younger members of the club. At this point, the financial system the club has in place has only been used once by Pete.

19:40 – Dave has finished giving the lesson and is now gearing up to fence anyone whom is willing to fence him.

19:41 to 20:30 – For the past 3 quarters of the hour or so, everyone has been doing routine actions, either fencing, sitting at the side of the hall waiting for a lane/duelling partner or are simply having a conversation. The system has not been used in this time.

20:35 – Some people are now taking off their gear and packing it away. Duels are still going on but a few people look like they have the intent to leave soon. Dave seems to be talking to one of the newer members of the club and appears to be handing out a business card.

20:45 – Most people have geared down now and there are only two duels still going on. The people whom paid at the start leave straight after they have geared down and said their goodbyes. Those whom have not paid are seeking out Pete whom is sat on the stage - with his money tin and notebook next to him - having a conversation with one of the members of the club.

20:46 to 20:55 – As people pay Pete and leave the club, Peter does not write down the names and amount paid straight away as he did at the start of the session, he has committed it to memory. Some of the last members of the club to leave will take a bag or two of gear on their way out as to help Dave reload the van. When the last person leaves, Pete writes down the names and amount paid by people from memory and the days date, stores the page from the notebook into a file and then takes the last of the gear to the van.

21:05 – The session has finished, the hall cleared and all members of the club have left.

END OF OBSERVATION.

### Key Findings / Summary

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## Document Analysis – Key Findings / Summary

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|  |  |  |
| --- | --- | --- |
| # | Name | Description |
| *1* | *Name* | *Name of customer, used to…..* |
|  |  |  |

# 2.2 Research into Existing Solutions

http://www.softwareadvice.com/uk/

# 2.3 Stakeholders and Requirements

# 2.4 Data Collected For Input (Existing System)

|  |  |
| --- | --- |
| Field | Description |
| *Forename* | *Each member of staff is referred to by this, also displayed on name badge* |
|  |  |

# 2.5 Processing Carried Out (Existing System)

|  |  |
| --- | --- |
| Process | Description |
| *Add, Edit Search, Sort, Filter, Calculate, Store, Retrieve etc.* |  |
| *Add new sale* | *To add a sale….* |

# 2.6 Outputs (Existing System)

|  |  |
| --- | --- |
| Output | Description |
| *Generate a ????* | *A list of…..* |
|  |  |
|  |  |

# 2.7 Limitations (Existing System)

# 2.8 Specification

# 2.9 Methods to be used

# 2.10 Objectives and Success Criteria

|  |  |  |
| --- | --- | --- |
| # | Objective Details | Success Criteria  & Required Performance |
| 1 |  |  |
| 2 |  |  |