

s o f i a

# **QA Metrics**

*End of First Iteration*

# **Document Control**

| <b>Editor</b>          | <b>Date</b>       | <b>Update</b>  |
|------------------------|-------------------|--|
| <b>Calum Armstong</b>  | <b>11/03/2015</b> | <b>Document Created</b>  |
| <b>Calum Armstrong</b> | <b>12/03/2015</b> | <b>Employee's self-written metrics amended and format altered</b>  |
| <b>Alex Cash</b>       | <b>12/03/2015</b> | <b>Added additional reports from team members</b>  |
| <b>Calum Armstrong</b> | <b>13/03/2015</b> | <b>v4 - Re-formatted to abide by company standards and solve problems created when document was converted to and from google doc</b> |

# **Table of Contents**

|   |           |
|---|-----------|
| <b>1.0 Project Manager – Alex Cash.....</b>                           | <b>4</b>  |
| <b>2.0 Contracts and Documentation Manager - Calum Armstrong.....</b> | <b>5</b>  |
| <b>3.0 Specialist Software Developer – Dan Berhe.....</b>             | <b>6</b>  |
| <b>4.0 User Experience Designer – Sam Hall .....</b>                  | <b>7</b>  |
| <b>5.0 Lead Software Developer - Alistair Jewers.....</b>             | <b>8</b>  |
| <b>6.0 Assistant Finance Manager – Penny Nicole .....</b>             | <b>9</b>  |
| <b>7.0 Finance Manager – Emmanuel Olutayo .....</b>                   | <b>10</b> |
| <b>8.0 Lead Software Tester – Samuel Raeburn .....</b>                | <b>11</b> |
| <b>9.0 Marketing Manager – Jake Ransom .....</b>                      | <b>12</b> |
| <b>10.0 Brand Manager – Lewis Thresh .....</b>                        | <b>13</b> |

**1.0 Project Manager – Alex Cash**

| Metric  | Measurement  |
|---|--|
| Team is content with their work and feel confident they know what their tasks are.  | Continue to organise regular group meetings but ask the group if they feel well organised, content, and know their tasks. If not, how it can be improved.  |
| <b>Review</b><br><br><i>From asking team members I feel like this has been a success, but there is room for improvement. With the help of our development manager it has been relatively straightforward to assign tasks to individuals, but there have been occasions where a team member has completed their task but is not sure what is needed next. More thorough planning needs to be in place, breaking down large chunks of work into smaller tasks.</i>  |  |
| All deliverable deadlines met with work of a good standard.   | Ensure all documents/deliverables are submitted as per the deadline, ensuring beforehand that the whole team is happy with the quality of the work that is being submitted.  |
| <b>Review</b><br><br><i>To date, all deadlines have been met and all deliverables handed in on time – in this respect this metric can be considered passed. However, we have yet to receive a huge amount of feedback, only for one task; the tender presentation. The feedback for the tender presentation was good overall but could definitely have been better however I am in the process of discussing this assessment with the university as the team feels the assessment was entirely fair. Other than this, I feel that all of the handed in work has been of a good or excellent standard, and consider this QA metric passed.</i> |  |
| Final product is at least representative of the initial plan (not required to be exactly the same) and is of a high standard.   | After completion, compare the finished product with the initial product plan to see if we have met our initial requirements. Also, gather opinions of others (outside of the team) on whether the product is of a high standard. |
| <b>Review</b><br><br><i>cannot be assessed until the end of the project</i>   |  |
| Final product delivered on time.  | Ensure product is in a finished stage when it is submitted to the customer on the deadline. This will be dependent on the team's confidence that the product has met our requirements.   |
| <b>Review</b><br><br><i>cannot be assessed until the end of the project</i>   |  |

**2.0 Contracts and Documentation Manager - Calum Armstrong**

| Metric  | Measurement  |
|---|--|
| Successful contracts  | Number of proposals vs number of successful contract                 |
| <p style="text-align: center;"><b>Review</b></p> <p><i>4 Contracts were successfully agreed upon for the buy and sell of 4 media handlers with a single company.</i></p> <p><i>An offer from a second company was made to buy 2 further media handlers from us which fell through due to price negotiations. We were unable to offer them the lowest price due to their restricted demands.</i></p>   |  |
| Documentation availability  | Number of requests for documents / updated documents                 |
| <p style="text-align: center;"><b>Review</b></p> <p><i>In general this has been achieved; however there were times where minutes and payroll summaries have had to have been requested. When they have been requested however, they were able to be provided the same day.</i></p> <p><i>In the case of minutes, requests should not have to be made and more of an effort should be made to ensure they are uploaded on the same day as the meeting.</i></p> <p><i>In the case of payroll summaries, delays have in all cases been the result of timesheets not being handed in on time. This was addressed in meetings and was improved upon last week.</i></p> |  |
| Timesheet management  | Number of timesheet summaries provided to finance by mid-day Tuesday |
| <p style="text-align: center;"><b>Review</b></p> <p><i>This has rarely been the case due to late hand in of timesheets. The issue has been discussed as mentioned above and should improve over the coming weeks.</i></p>   |  |

**3.0 Specialist Software Developer – Dan Berhe**

| Metric   | Measurement  |
|--|--|
| Number of bugs   | Record number of bugs, if any, each time a class/method is tested                |
| <b>Review</b><br><i>It is an ongoing process. Bugs found so far have been taken from test reports and recorded in a separate document indicating the status of the bugs (fixed/pending).</i> |  |
| Time between bugs found  | Track the frequency of bug occurrence  |
| <b>Review</b><br>Ongoing. Dates of when the bugs found so far were reported have been recorded in the same document as the number of bugs.   |  |
| Comments in code   | Comparison of lines of comments and lines of codes.                              |
| <b>Review</b><br>Adequate comments have been added (by the person responsible for the class). So far the comments to code ratio is 20.5%.  |  |
| Compiling errors   | Produce a compilation report to indicate the number of errors during compilation |
| <b>Review</b><br>It is an ongoing process and cannot be fully assessed until the end.  |  |

**4.0 User Experience Designer – Sam Hall**

| Metric   | Measurement  |
|--|--|
| Design cost  | Hours spent per individual researching and producing UX Design |
| <b>Review</b><br><i>I have conducted my own research in reading books and analysing other companies design languages (as evidenced by a small design document i produced for the team). I have spent less time than I would like on UX design recently due to other commitments.</i> |  |
| Deliverables   | Number of UX design iterations complete.                       |
| <b>Review</b><br><i>The UX design has cycled through a number of different iterations to arrive where it is now. I am happy where we are heading in terms of design. The major current task is to produce a large set of custom icons for the product.</i>                           |  |
| Appropriateness  | Design meets initial specifications                            |
| <b>Review</b><br><i>The design has its general design complete, but does need some ironing out in terms of the exact components such as icons.</i>   |  |
| Defects  | Number of elements that do not meet design specification       |
| <b>Review</b><br><i>Some of the early UX designs were not good enough for the product. As such they were modified and changed until they were good enough.</i>   |  |

**5.0 Lead Software Developer - Alistair Jewers**

| Metric   | Measurement   |
|--|---|
| Features implemented vs features planned   | Comparison of the features planned for each iteration with the features considered complete at the end of the iteration.  |
| <p style="text-align: center;"><b>Review</b></p> <p><i>All features are recorded in the 'Github issues' platform and tagged with the iteration for which they are required. Each feature is given an assignee who is responsible for its completion. Once a feature is complete it's 'issue' is closed. The progress of each iteration is tracked automatically, and the number of open and closed issues for each iteration can be easily compared.</i></p> |   |
| Time spent coding vs planned.  | Monitoring the start and end of the coding process overall, as well as the start and end of individual features.  |
| <p style="text-align: center;"><b>Review</b></p> <p><i>The 'Github' platform branching system and network graph feature are being used to track the development process and the start and end dates of individual features.</i></p>  |   |
| Bug tracking.  | Use bug or issue tracking software to maintain a list of all bugs that have been identified and whether they have been fixed and tested. Bugs should also be labelled fatal or not fatal. |
| <p style="text-align: center;"><b>Review</b></p> <p><i>The 'Github Issues' platform is being used to track all bugs and their status, as well as code changes that affect or fix them. Bugs have assignees designated to fix them, and notes relating to their severity.</i></p>   |   |



**6.0 Assistant Finance Manager – Penny Nicole**

| Metric   | Measurement  |
|--|--|
| Accuracy of financial information  | Check with other members of the Finance Team.<br>When documents are completed, get two other members of the company with the appropriate knowledge to check the documents. |
| <b>Review</b><br><br><i>Worked with other member of Finance Team (Finance Manager) on all documents excluding Weekly Financial Review. Did not get two other members of the company to check the documents.</i><br><i>Did not get two other members of the company to check the documents.</i> |  |
| Accurate financial predictions   | Check weekly accounts against what has been predicted.   |
| <b>Review</b><br><br><i>Failed according the measurement. However, the financial reports (submitted to financial backer) do check the predicted against the actual expenditure. May wish to review the need for a weekly financial review.</i>   |  |
| Return on assets   | Make sure the most suitable group member is doing what is required of them as efficiently as possible.   |
| <b>Review</b><br><br><i>New timesheets demanding justifications for hours claimed appear to be working to ensure efficiency. The members of the company look to be working well and adhering to deadlines.</i>   |  |

**7.0 Finance Manager – Emmanuel Olutayo**

| Metric   | Measurement   |
|--|---|
| Return on investment   | Check returns with appropriate department in company  |
| <b>Review</b><br><i>The investments the company made into media handlers are still in the process of completion but I have seen them work first hand and they seem to be a good investment.</i>  |   |
| Pay Back period  | Pay interest Promptly   |
| <b>Review</b><br><i>We changed our first financial plan which got accepted so we are waiting on the feedback from the financial backer on the new financial plan.</i>  |   |
| Operating expense control  | Check weekly accounts against what has been predicted   |
| <b>Review</b><br><i>Been speaking to the group about how many hours they are working and checking if they are reporting appropriate hours. New time sheets where created so each employee can justify their hours. Also weekly financial reports have been made to check how the company is doing financially.</i> |   |
| Return on assets   | Make sure the most suitable group member is doing what is required of them as efficiently as possible therefore saving money. |
| <b>Review</b><br><i>Everyone seems to be working at their own pace and efficiently too and peoples hours reflect this.</i>   |   |
| Stable revenue Growth  | Check cash flow every month or week to make sure all cash inflow in financial documents add up.                               |
| <b>Review</b><br><i>I've not been checking the financials every week which I am supposed to be getting a report on every week.</i>   |   |

**8.0 Lead Software Tester – Samuel Raeburn**

| Metric  | Measurement  |
|---|--|
| Number of units tested  | Keep track of the amount of modules of code which have been tested                             |
| <p style="text-align: center;"><b><u>Review</u></b></p> <p><i>The XML Parser, XML Writer, data structures, audio handler, video handler, answer box handler, multiple choice handler, image handler, renderer, LearnEasy GUI and LearnEasy runtime data have been tested; totalling 11 units.</i></p> |  |
| Quality of testing  | Number of defects in code found during testing   |
| <p style="text-align: center;"><b><u>Review</u></b></p> <p><i>Testing has found a total of 15 defects in the software.</i></p>  |  |
| Appropriateness   | Design meets initial specifications  |
| <p style="text-align: center;"><b><u>Review</u></b></p> <p><i>Complete UI design is not yet complete. UI has currently gone through 3 iterations, all aiming to meet initial design specifications that are documented in UX Design Documentation.</i></p>  |  |
| Number of complaints  | Number of complaints made by a third party (may or may not be the customer) about the software |
| <p style="text-align: center;"><b><u>Review</u></b></p> <p><i>The only feedback from the customer (or any other party) thus far is that the GUI could do with improvements.</i></p>   |  |

**9.0 Marketing Manager – Jake Ransom**

| Metric  | Measurement                       |
|---|-----------------------------------|
| Brand Awareness   | Polls, such as surveys            |
| <p style="text-align: center;"><b><u>Review</u></b></p> <p><i>The marketing hasn't concentrated on portraying or advertising our company/product brand. To improve on this, more surveys will be sent out with better description of the intended product and with relevant company logos.</i></p> <p><i>There might be scope for advertising the brand &amp; product. An advertising strategy will be written up to detail how this will be achieved</i></p> |                                   |
| Customer Satisfaction   | Customer feedback through reviews |
| <p style="text-align: center;"><b><u>Review</u></b></p> <p><i>cannot be assessed until the end of the project</i></p>   |                                   |
| Market Share  | Market Research                   |
| <p style="text-align: center;"><b><u>Review</u></b></p> <p><i>Our potential share of the market is quite large given that not many other products like this exist. The surveys showed a good demand for the product and a gap in the market. However to improve on this, more surveys will be required to better define the market share and give a more accurate representation to work with.</i></p>  |                                   |
| Sales   | Amount of units sold              |
| <p style="text-align: center;"><b><u>Review</u></b></p> <p><i>cannot be assessed until the end of the project</i></p>   |                                   |

**10.0 Brand Manager – Lewis Thresh**

| Metric  | Measurement   |
|---|---|
| Design cost   | Hours spent per individual researching and producing logo and design. |
| <p style="text-align: center;"><b><u>Review</u></b></p> <p><i>Hours have been dedicated to researching the current market in user experience to find a design (both GUI and Logos) that represent our company and products appropriately and also fit in the current market.</i></p>              |   |
| Deliverables  | Number of logo design iterations complete.                            |
| <p style="text-align: center;"><b><u>Review</u></b></p> <p><i>Application logos have currently gone through 3 main iterations with smaller changes being released as well. Current iterations are Learneasy_v2.3 and Teacheasy_v2.3</i></p>   |   |
| Appropriateness   | Design meets initial specifications                                   |
| <p style="text-align: center;"><b><u>Review</u></b></p> <p><i>Complete UI design is not yet complete. UI has currently gone through 3 iterations, all aiming to meet initial design specifications that are documented in UX Design Documentation.</i></p>  |   |
| Defects   | Number of elements that do not meet design specification              |
| <p style="text-align: center;"><b><u>Review</u></b></p> <p><i>We have currently not made a list of defects that did not meet our initial specification. However previous iterations have been saved of which we can document the sections of which do not meet the initial specifications</i></p> |   |