Personas

Persona 1: Mark Harris (WHO Analyst)

Mark is a 52-year old Analyst for the World Health Organization (WHO). When Mark is not making analytical decisions and writing reports on our current world state, you'll find him bonding with his grandchildren or sampling the local coffee scene. Mark's life goal is to improve the world's health and to find a way of balancing his family with his demanding work life. Mark uses the MalariaVis platform for his daily goals of downloading data to generate his own reports and visualization in Excel. Mark wants to ensure that he can access the platform for retrieving data seamlessly and with simple configurations



to match his low level of web knowledge with his high competency with spreadsheets and Excel.

Activities: Mark makes statistical assumptions and looks after his grandchildren

Attitudes: Mark is a busy-body, he always has something on his to-do list and likes to keep an eye on his deadlines so he can ensure he is efficient in his time management.

Aptitudes: Mark is the office Excel wizard however does not enjoy web platforms as much. **Domain Knowledge:** Mark is great working with large datasets however he does not spend much time using the web platform.

Motivations: Mark is engaging with the MalariaVis platform as he is invested in getting data as efficiently as possible for his job as an analyst and the current process he uses i too slow and cumbersome.

System Use Goals: Mark's core goals for the platform is to download data in a format which is easy for him to perform statistical analysis with, and to see visualizations which give a brief window into what he can expect.

Interaction Frequency: Mark will interact with the system bi-weekly for his employment, it will often consist of short interactions for retrieving data.

Priorities: Mark's high usage coupled with his lack of knowledge and demand for specificity makes his priorities how fast and simple the platform is to get data out of, and what level of configuration he can apply when retrieving data.

Tinkering: Mark wants efficiency with software, a short guide or tutorial he sees as an investment and does not enjoy having to find things out himself.

Persona 2: Helen Nguyen (Travelling Student)

Helen is a 22-year old student studying fine-arts. When Helen is not studying for her courses, she can be found exploring the local art scene, and loves to drink coffee. Helen's life goal is to become a professional artist and travel the world for inspiration. Helen's use of the MalariaVis platform surrounds her goals of analysing the risks of visiting countries of the world and will help in deciding if she return. Helen wants to be able to easily see which parts of the world she will be at most risk when visiting and wants to be able to zoom in on each particular country.



Activities: Helen writes music, has a passion for oil paintings and sampling the local coffee with her friends

Attitudes: Helen is easy-going, has time to appreciate the finer details of things and cares heavily about the appearance of products.

Aptitudes: Helen has self-taught herself multiple arts techniques and is great at using image editing platforms on her Macbook.

Domain Knowledge: Helen is great at using the web in general and can find her way around modern websites with ease, but data visualization platforms are not her common consumption. **Motivations:** Helen is engaging with the MalariaVis platform as she wants to evaluate the risk of getting Malaria in specific countries.

System Use Goals: Helen's primary goal for the system is to see how risky it is for her to travel to Vietnam for the christmas holidays compared to the risk of her travelling somewhere else. **Interaction Frequency:** Helen will only interact with the system when she wants to think about travel, so she will use it only a few weeks of the year, but a lot during those periods as she weighs up her options.

Priorities: Helen is happy to spend time working with the platform, she cares about how effective the visualizations are for looking at specific countries, as well as how aesthetically pleasing they are for when she shows her friends.

Tinkering: Helen loves to find things out for herself and tinker with software, tutorials and guides are always a last resort.

Persona 3: Tamara Potter (Medicine Researcher)

Tamara is a 37-year old researcher for the Cambridge University department of medicine. When Tamara is not researching, she is out on the courts playing Tennis at a semi-professional level or looking after her two young children. Tamara's life goal is to find affordable healthcare options for the developing world and raise her two children to the best of her ability. Tamara's use of MalariaVis surrounds her needs to locate issues



in the medical world which she can help to fix. Tamara wants to be able to see and export comparisons of how malaria affects different areas of the world that she can use in her upcoming conference and research papers.

Activities: Tamara plays a lot of sport and develops research into how we can use medicine to save human lives.

Attitudes: Tamara is a motivated mother and researcher giving everything her all, she does however get annoyed with systems not clearly displaying why and how things work.

Aptitudes: Tamara has a doctorate in modern medicine and took a few web development papers in her time at university.

Domain Knowledge: Tamara uses web platforms all the time for her research and has a lot of knowledge about malaria from her studies.

Motivations: Tamara is engaging with the MalariaVis system as she needs to produce some compelling visualizations to present at her upcoming conference and to add into her research papers. Tamara also considers it useful to be able to export datasets so she can have factual data in her reports as well.

System Use Goals: Tamara's main goal for the system is being able to zoom in on areas of the world to see how they are affected by malaria, and then being able to export the data.

Interaction Frequency: Tamara will be a high frequency user, interacting with the system on daily basis to generate differently configured data for her research.

Priorities: Tamara's high usage nature means her core priorities are how useful and ast the systems are to use. She is okay with spending a bit of time learning how to use the system efficiently.

Tinkering: Tamara is happy to find things out for herself, but is much happier with clear information and error messages she can read.

Scenarios & Goals

Scenario 1: Investigate the spread of malaria incidences in South-East Asia (Mark)

Goal: Mark wants to investigate malaria in South-East Asia. He wants to export this data so that he can use some of it in his presentation to the WHO.

- 1. Mark has gotten back from his lunch break after having a conversation with a work friend about a website which shows an intuitive visualisation of malaria. Mark logs into his computer and starts up Chrome.
- 2. Mark searches for the website on Google and arrives at a overview of the malaria data.
- 3. Mark sights Asia and zooms into the South-East Asian region to see the data more clearly.
- 4. Mark decides that he has a good understanding of malaria incidences and would like more information in specific countries in the South-East Asia region.
- 5. After investigating all the countries relevant to his presentation next week, he exports the data and downloads the resulting file so he can make his own analysis tomorrow.

Scenario 2: Investigate Malaria mortality rate within risk countries (Tamara)

Goal: Tamara is doing some malaria research. Since she's trying to treat malaria, she cares about saving patients who have already contracted the disease. She therefore wishes to look at mortality rate date, and compare it between countries as a starting point for her research.

- 1. Tamara has just come back from a tennis game, and is wanting to get started on her presentation for her university about the mortality of malaria in the world.
- 2. After some searching around on the web, Tamara arrives at MalariaVis to try and extract some data out to put within her presentation.
- 3. Tamara navigates to the filters found within the site and starts to filter to countries that have a high mortality rate with contracting and dying from malaria.
- 4. Once she has the countries found with a high mortality rate, Tamara finds that she needs to filter within the system further, by removing countries that she is not interested in.
- 5. Once all the countries are selected, Tamara looks and analysis the graph that shows the mortality rate for the selected countries.
- 6. After Tamara has analysed the results from the graph, she closes her web browser and starts on her presentation. Tamara is happy about how easy MalariaVis was to use and navigate through to get the required information.

Scenario 3: Investigate Malaria rate within singular country (Helen)

Goal: Helen wants to find out how bad malaria is in Vietnam, since she's visiting her grandmother there.

- 1. Helen is planning her trip to Vietnam, and wants to know if she should be worried about the possibility of contracting Malaria.
- 2. Helen finds MalariaVis, is shown an overview of Malaria rates across the world.
- 3. Helen zooms into view the details of Malaria in Vietnam, but Geography is not one of her strengths and she accidentally zooms into Thailand instead.
- 4. Upon realizing her mistake, Helen undoes the zooming action and is once again looking at the overview of the world.
- 5. Helen tries again, this time successfully zooming in to show the details of Malaria incidence rates in Vietnam. Upon investigating the number of Malaria cases in the country, she's quite nervous and decides she could consult with a doctor before her trip.

Scenario 4: Exporting image through system (Tamara)

Goal: Tamara is preparing a presentation and she wants to export some specific data as an image.

- 1. Tamara wants some graphics to show at her upcoming presentation, so she returns to MalariaVis.
- 2. She filters the data to only the countries that her research is relevant to.
- 3. She exports this as an image. The image shows the data from these countries overlaid on the map, with other countries greyed out.