## Timeline for Mboalab/Outreachy Internship

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| **Proposed Time** | **Work Description / Proposed Tasks** | **Milestones** |
| **Weeks 1 - 2**  **6 - 17 December** | * Onboarding meeting between Mboalab mentors and fellow interns, review of internship objectives and agree on a mode of communication during internship; * Build a functional online platform for the project embedded in the Mboalab website. Finalize content creation for the projects online platform and launch the platform to the general public; * Starting the Design of an app based on the malaria Screener model https://github.com/nlm-malaria/MalariaScreener * 06 dec, 2021, Blog prompt: ["Introduce yourself"](https://www.outreachy.org/docs/internship/#blog-week-1) * Dec. 7, 2021, 3 p.m. UTC - Chat schedule * Feedback #1 due on Dec. 13, 2021 | Mboalab website is revamped, including the online platform for the project. |
| **Weeks 3 - 4**  **20 - 31 December** | * 20 dec, 2021, Blog prompt: "Everybody struggles" * Dec. 21, 2021, 3 p.m. UTC - Chat schedule * Preliminary investigation on RST and Decision Tree Algorithm to be used in the project. Create work schedules and tasks. * Design survey questions for medical practitioners, medical laboratory scientists to understand the symptoms, level and severity of typhoid fever. * Christmas break (24 dec – 02 jan) | Understanding the maths concept behind RST and decide which is the best between RST and Decision Trees for our Decision Support System |
| **Weeks 5 - 9**  **3 Jan - 4 Feb** | * 03 jan, 2022, Blog prompt: "Think about your audience" * Jan. 4, 2022, 3 p.m. UTC - Chat schedule * Select the most appropriate data collection tool based on the current research already done (contributions). * With the chosen data collection tool, design the questions with the tool from the pool of questions available as contributions. Get more familiar with the software to be used. * Chart out a plan to obtain a broad and representative range of data (including images), taking into account age, gender, ethnic group, geographic location, etc. ( By Mboalab Team) : * Reach out to communities and other plausible partners that can assist in the data gathering process(for example, the Medical Doctors Association can ethically assist in providing anonymous data from patients). ( By Mboalab Team) ; * Meeting with these partners would also give insights to suggestions, tips and possible solutions. These solutions will be classified by duration (long/medium/short term) ( By Mboalab Team) ; * Gather information from non medical practitioners (patients) to create a more robust dataset. ( By Mboalab Team); * Evaluation of the DSS part of the app * Feedback #2 due on Jan. 10, 2022 * Jan. 17, 2022, Mid-point project progress blog post * Jan. 18, 2022, 3 p.m. UTC - Chat schedule * Jan 20, 2022 - $3000 stipend will be issued by outreachy to interns with successful feedback #1 from mentors. * Feedback #3 due on Jan. 31, 2022 * Jan. 31, 2022 - Blog prompt: "Career opportunities" * Feb. 1, 2022, 3 p.m. UTC - Chat schedule | * The data collection tool is functional on the Mboalab website; |
| **Weeks 10 - 12**  **7 – 25 Feb** | * Validation of the RST or Decision Tree Algorithm to be used in the project. * Image collection and labeling, try to get a large volume of images to build confidence in our training/ test data. * Define strategies and work frame, begin to design the convolutional neural network to train images and decision tree to train structured data. * Using a CNN, trained on the images and other structured data to obtain insights about the symptoms of Typhoid Fever and its severity. * Analyze results and continue to test our algorithm to reduce bias and error. * Evaluation of the scanning part of the app * Feb. 15, 2022, 3 p.m. UTC - Chat schedule * Feedback #4 feedback due | * DSS is functional |
| **Week 13**  **28 Feb - 4 Mar** | * Feb. 28, 2022 - Final project progress blog post * March 1, 2022, 3 p.m. UTC- Chat schedule * Finishing touches * Final report drafting on the work done. * Submit a scientific paper with all the interns, mentors, coordinators as co-authors * Evaluation/Feedback from mentors. * Share findings from the project in a publication. * 04 Mar, 2022 - $4000 stipend will be issued by outreachy to interns with successful feedback #1 from mentors. | * The complete apps is functional |