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**Project Charter**

**TEAM #: Blessing Muhwezi**

**CLIENT NAME/COMPANY: SolarTech Innovations**

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| 1. ***PROJECT GOALS*** | | | | |
| * To develop an innovative solar panel tracking system that maximizes energy efficiency. * Enhance the integration of solar technology in urban environments. | | | | |
| 1. ***DELIVERABLES AND RESEARCH GOALS*** | | | | |
| Deliverable #1 – Design a prototype for an advanced solar panel tracking system.   * Research on current solar tracking technologies. * Development of a 3D model for the prototype. * *Sub-deliverable #1* * *Task/item/topic #1, … etc.* * *Sub-deliverable #2* * *Sub-deliverable #3* * *Sub-deliverable #4* * *… etc.*   Deliverable #2 – Feasibility study for urban integration.   * Assessment of urban landscapes suitable for solar technology. * Strategies for efficient energy storage.  Deliverable #3 –Deliverable #4 – ***Research Goals:***   1. **For the Solar Panel Tracking System**:    * Investigate the most efficient solar tracking mechanisms.    * Explore innovative materials that enhance durability and efficiency.    * Analyze energy output data from different solar panel orientations. 2. **For Urban Integration**:    * Study the impact of urban landscapes on solar energy harnessing.    * Research the most effective ways to integrate solar technology in densely populated areas.    * Evaluate potential partnerships with urban developers for sustainable energy solutions. | | | | |
| 1. ***SCOPE DEFINITION*** | | | | |
| The project will include:  * Design and development of the prototype * urban integration feasibility study.  The project will not include:  * Large-scale production * commercial distribution. | | | | |
| ***4. ASSUMPTIONS, CONSTRAINTS & DEPENDENCIES*** | | | | |
| *Assumptions:*   * Availability of necessary technology and materials. * Market Viability * Regulatory Compliance * Expertise Availability   *Constraints:*   * Budget limitations * Time constraints. * Technical Limitations * Urban Environment Challenges   *Dependencies:*   * Cooperation from urban planning authorities. * Stakeholder Support * Technological Advancements * Supplier Reliability | | | | |
| ***5. RELATED DOCUMENTS*** | | | | |
| Research papers on solar energy efficiency, urban planning guidelines. <https://www.frontiersin.org/articles/10.3389/fenrg.2022.879985/full>  https://news.mit.edu/2021/photovoltaic-efficiency-solar-0224 | | | | |
| ***6. PROJECT ORGANIZATIONAL STRUCTURE*** | | | | |
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| **Name** | | **Role** | **Contact information** | |
| Athan Muhwezi | | Project Manager |  | |
| Alinda Miriam | | Lead Designer |  | |
| Arnold Taremwa | | Research Analyst |  | |
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| 1. ***Confidentiality Agreement*** | | | | |
| For the purpose of conducting our team project for the course – we herein signers agree to:Keep anonymous the identity of the interviewed respondents, including the project sponsor (client) and any associated party of the sponsor.Not use the respondents’ contact information for any other purpose than to conduct the present study.Not use the collected data for any purpose other than to complete the present study.Not provide the collected data to any third party other than our client and the professor, and to keep all the research information confidential by not discussing or sharing it in any form or format (eg. disks, tapes, transcripts) with anyone other than our client and the professor. The research results will be discussed with the faculty involved in the Capstone course at the final presentation only. | | | | |
| ***8. PROJECT AUTHORIZATION - This can come as an email from your client confirming acceptance*** | | | | |
| Approved by:  *Blessing Muhwezi* | Client: Penelope Kamusiime | | | Date 22/01/2024 |