

**INVENTION DISCLOSURE FORM (IDF)**

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| Title of Invention | Automated Gardening System |
| Descriptive Keywords | Automated Gardening System |
| Field of Invention | Software Engineering, Computer Science |
| Detail of Inventor(s) | 1. Imran Ali
2. Faizan Amjad
3. Hassan Nadeem
4. Muhammad Zahid
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| Category of IP (Product, Process, Technology, etc.) | Technology, Product |
| Development Status (Idea, Prototype, Validation, Production) | Validation |
| Key Scientific Aspects | Computer Science and Informatics |
| Brief Description of Invention | This project aims to design and implement an automated gardening system that integrates various sensors, actuators, and a user-friendly interface to enable efficient plant care. The system will monitor environmental conditions such as soil moisture, temperature, and light levels, and autonomously adjust watering, lighting, and ventilation to optimize plant growth. Additionally, it will provide real-time feedback to users via a mobile or web interface, allowing them to remotely monitor and control the system. Through this project, we aim to promote sustainable gardening practices and facilitate agriculture by making plant care accessible and convenient for users of all skill levels. |
| Commercial Potential | Moderate  |
| Possible Commercial Partners | Nurseries, Garden pants, Plant sales outlet |
| Proposed Type of IP Protection (Patent, Copyright, Trademark, Design etc.)  | Patent |
| IDF Submission Date | 7th May, 2024 |

Signature and Stamp

**Lead Inventor/Supervisor/FYP Focal Person/HoD**