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|  | User Story | Tasks | Estimated size (sp) | Estimated time (h) | Estimated costs (£) | Actual costs (£) |
| Sprint 1 | As a prison manager, I want a person tracker so I can monitor where all people in the prison are located (4.1) | 1. Logging prisoners leaving and entering | 3 | 4 | 200 | 200 |
| 2. Send microbit data to server | 3 | 2 | 100 | 50 |
| 3. Pull server data to frontend | 3 | 2 | 100 | 100 |
| 4. Display data on frontend | 3 | 2 | 100 | 100 |
| As a prison manager, I want a dashboard so I can easily see where people are in the prison and its zones (4.2) | 1. Get data from server | 1 | 1 | 50 | 50 |
| 2. Process and perform calculations | 1 | 1 | 50 | 100 |
| 3. Display data on the frontend | 1 | 1 | 50 | 100 |
| As a prison warden, I would like an environment monitor to track the conditions of the prison areas (4.3) | 1. Gather sensor readings | 2 | 2 | 100 | 100 |
| 2. Send Microbit data to server | 1 | 1 | 50 | 50 |
| 3. Display data on frontend | 2 | 1 | 50 | 50 |
| As a prison officer, I want a smart door system so that I can easily track the status of doors without having to check each one separately (4.4) | 1. Motion detection | 3 | 2 | 100 | 200 |
| 2. Alarm system | 4 | 4 | 200 | 250 |
| 3. Send microbit data to server | 1 | 3 | 150 | 150 |
| 4. Display data from server | 2 | 3 | 150 | 150 |

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|  | User Story | Tasks | Estimated size (sp) | Estimated time (h) | Estimated costs (£) | Actual costs (£) |
| Sprint 2 | As a prison warden, I would like an environment history feature so I can look back at zone conditions when incidents occur (5.1) | 1. Alter database for history records | 1 | 1 | 50 | 50 |
| 2. Implement middleware to enable history addition | 3 | 2 | 100 | 150 |
| 3. Create UI | 2 | 2 | 100 | 150 |
| 4. Get data from server | 1 | 1 | 100 | 50 |
| 5. Process data into correct form | 3 | 2 | 100 | 150 |
| 6. Display data in visualisation | 4 | 3 | 150 | 250 |
| As a prison manager, I would like a movement history feature so I can track how people move through the system (5.1) | 1. Alter database to store history data | 2 | 2 | 100 | 50 |
| 2. Implement middleware to store history data | 2 | 2 | 100 | 50 |
| 3. Extract history data from server | 1 | 1 | 50 | 50 |
| 4. Playback functionality | 4 | 4 | 200 | 300 |
| 5. User location proportions | 3 | 3 | 150 | 150 |
| 6. Display data on frontend | 2 | 3 | 150 | 150 |
| As a prison manager, I would like a mobile app so I can conveniently access the smart system (5.2) | 1. Mobile UI | 2 | 3 | 150 | 150 |
| 2. Sprint 1 functionality | 4 | 4 | 200 | 200 |
| 3. Sprint 2 functionality | 4 | 5 | 250 | 300 |
| As a prison manager, I want a warning system to notify guards about any dangers/warnings that could occur in a prison (5.3) | 1. Check for set outlier values from received signals | 2 | 1 | 50 | 50 |
| 2. Store warning in database table | 1 | 1 | 50 | 100 |
| 3. Frontend pulls from database and displays warning | 3 | 2 | 100 | 150 |
| 4. Base logger sends mitigatory signal to door microbits to lock | 2 | 2 | 100 | 50 |
| As a prison officer, I would like a Telegram bot to quickly gather information about the prison (5.4) | 1. Posts periodic environment data | 3 | 2 | 100 | 150 |
| 2. Display warnings from the system | 2 | 2 | 100 | 100 |
| 3. Pull environment data on request | 3 | 3 | 150 | 100 |
| As a prison manager, I would like a user record system so I can manage and view details about the current people in the prison | 1. Alter database for user types | 3 | 2 | 100 | 100 |
| 2. Register system to add new users | 4 | 4 | 200 | 350 |
| 3. Get data from the server | 3 | 1 | 50 | 50 |
| 4. Display records | 2 | 1 | 50 | 100 |
| 5. Enable sorting and searching | 2 | 2 | 100 | 100 |

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|  | User Story | Tasks | Estimated size (sp) | Estimated time (h) | Estimated costs (£) | Actual costs (£) |
| Sprint 3 | As a customer (eg. hotel manager) of this system, I would like the ability to be able to transfer domains (6.1) | 1. Alter database for superusers | 1 | 1 | 50 | 50 |
| 2. Superuser login | 3 | 3 | 150 | 100 |
| 3. MFA system | 3 | 2 | 100 | 100 |
| 4. Frontend switcher | 2 | 2 | 100 | 100 |
| 5. Server API switcher | 2 | 2 | 100 | 100 |
| 6. Database application switcher | 2 | 2 | 100 | 50 |
| As a customer of the system I would like all monitoring functionality of the prison system so I can monitor conditions in my domain (6.2) | 1. Location monitor | 1 | 1 | 50 | 50 |
| 2. Environment monitor | 1 | 1 | 50 | 50 |
| 3. Door monitor | 1 | 1 | 50 | 50 |
| As a customer of the system I want all history and communication functionality of the prison system so I can be notified and keep logs (6.3) | 1. Environment history | 1 | 1 | 50 | 50 |
| 2. Movement history | 1 | 1 | 50 | 100 |
| 3. Mobile app | 3 | 4 | 200 | 200 |
| 4. Warning/mitigation system | 1 | 1 | 50 | 50 |
| 5. Telegram bot | 1 | 1 | 50 | 50 |
| 6. Record system | 1 | 1 | 50 | 50 |
| As a manager I would like reports to gain useful information about the system | 1. Retrieve data from a database | 2 | 2 | 100 | 100 |
| 2. Process data and format | 4 | 4 | 200 | 200 |
| 3. Display data in visualisation | 3 | 3 | 150 | 250 |

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| Sprint | Estimated cost (£) | Total costs (£) |
| 1 | 1450 | 1650 |
| 2 | 3100 | 3600 |
| 3 | 1650 | 1700 |
| All | 6200 | 6950 |