



FIRE CERTIFICATE FC 003 02
DRAWING No. 4 of 6
AMENDED 12th MAY 2005

HEALTH AND SAFETY EXECUTIVE PO BOX 100 25 JAMES STREET BELFAST BT6 9JF	TELEPHONE (01232) 263333	MEANS OF ESCAPE IN CASE OF FIRE	WATERLESS TOILET CLASHBORN DOCK BELFAST	THIRD FLOOR PLAN	600x400 4 of 6	NO ENTRANCE UNDER DOOR DOORWAY 1200x2000	THE FIRE SERVICES (NORTHERN IRELAND) ORDER 1984 NO.1821	ISSUED BY DATE 1-10-2000	REVISIONS R 1 MAY 01	THE CLIENTS NAME FC 002 02
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CONSTRUCTION SHOWN IN BOLD LINES IS ACCEPTED AS PROVIDING A MINIMUM OF 1/2 HOUR FIRE RESISTANCE. UNLESS OTHERWISE INDICATED, DOORS SHOWN IN BOLD LINES ARE ACCEPTED AS PROVIDING A MINIMUM OF 1/2 HOUR FIRE RESISTANCE. THEY MUST BE EFFECTIVELY MAINTAINED AS SELF-CLOSING, OR AS IN THE CASE OF STORM DOORS "KEPT LOCKED SHUT" WHEN NOT IN USE. THE APPROPRIATE NOTICE IS DISPLAYED ON ALL FIRE DOORS.

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graph TD
    Start([How to choose a model]) --> Q1[What is the problem?]
    Q1 --> C[Classification]
    Q1 --> R[Regression]
    
    C --> Q2[What is the data?]
    Q2 --> C1[Categorical]
    Q2 --> C2[Numerical]
    Q2 --> C3[Mixed]
    
    C1 --> C1M[Logistic Regression]
    C1M --> C1M2[Decision Tree]
    C1M2 --> C1M3[Random Forest]
    C1M3 --> C1M4[Support Vector Machine]
    C1M4 --> C1M5[Neural Network]
    
    C2 --> C2M[Linear Regression]
    C2M --> C2M2[Ridge Regression]
    C2M2 --> C2M3[Lasso Regression]
    C2M3 --> C2M4[Elastic Net]
    
    C3 --> C3M[Decision Tree]
    C3M --> C3M2[Random Forest]
    C3M2 --> C3M3[Support Vector Machine]
    C3M3 --> C3M4[Neural Network]
    
    R --> Q2
    Q2 --> C1
    Q2 --> C2
    Q2 --> C3
    
    C1 --> C1M
    C1M --> C1M2
    C1M2 --> C1M3
    C1M3 --> C1M4
    C1M4 --> C1M5
    
    C2 --> C2M
    C2M --> C2M2
    C2M2 --> C2M3
    C2M3 --> C2M4
    
    C3 --> C3M
    C3M --> C3M2
    C3M2 --> C3M3
    C3M3 --> C3M4
    C3M4 --> C3M5[Neural Network]
    
    C1M5 --> MS[Model selection]
    C1M5 --> MD[Model deployment]
    C1M5 --> MM[Model monitoring]
    C1M5 --> ML[Model maintenance]
    
    MS --> CV[Cross-validation]
    CV --> ME[Model evaluation]
    ME --> A[Accuracy]
    ME --> P[Precision]
    ME --> R2[Recall]
    ME --> F1[F1 score]
    ME --> AUC[AUC]
    ME --> RMSE[RMSE]
    ME --> MAE[MAE]
    ME --> etc[etc.]
    
    MD --> M[Model]
    M --> D[Deployment]
    D --> E[Environment]
    E --> F[Framework]
    F --> G[Language]
    G --> H[Hardware]
    H --> I[Infrastructure]
    I --> J[Integration]
    J --> K[Interoperability]
    K --> L[Logging]
    L --> M
    
    MM --> M
    ML --> M
  
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The flowchart is titled "How to choose a model". It starts with a central question "What is the problem?". This leads to two main branches: "Classification" and "Regression".

Classification Branch:

- From "Classification", it asks "What is the data?".
 - If "Categorical", it lists: Logistic Regression, Decision Tree, Random Forest, Support Vector Machine, Neural Network.
 - If "Numerical", it lists: Linear Regression, Ridge Regression, Lasso Regression, Elastic Net.
 - If "Mixed", it lists: Decision Tree, Random Forest, Support Vector Machine, Neural Network.

Regression Branch:

- From "Regression", it asks "What is the data?".
 - If "Categorical", it lists: Logistic Regression, Decision Tree, Random Forest, Support Vector Machine, Neural Network.
 - If "Numerical", it lists: Linear Regression, Ridge Regression, Lasso Regression, Elastic Net.
 - If "Mixed", it lists: Decision Tree, Random Forest, Support Vector Machine, Neural Network.

Both branches lead to a "Model selection" section, which includes "Cross-validation" and "Model evaluation". The evaluation metrics listed are Accuracy, Precision, Recall, F1 score, AUC, RMSE, MAE, etc.

Finally, the flowchart leads to a "Model deployment" section, which includes "Model monitoring" and "Model maintenance". The deployment process is shown as a sequence: Model → Deployment → Environment → Framework → Language → Hardware → Infrastructure → Integration → Interoperability → Logging → Model.

[illegible]