|  |
| --- |
| Photo displaying partial image of two pie charts on a canvas-textured page |
| MyGCSE Maths  GCSE Maths revision system |
| |  |  |  | | --- | --- | --- | | Name: Uchenna Okafor | Candidate Number: 4436 | Center Number:11049 | |

Contents Page

Analysis

Background to and identification of the problem1

Description of the current system1

Problem with the current system1

Identification of prospective user(s)2

Identification of users’ needs and limitations3

Limitations4

Data sources and destination5

Data dictionary (existing system) 6

Data flow diagram (existing and proposed system) 6

Entity relationship diagram9

Object orientation planning9

System objectives12

Potential solutions14

Justification of chosen solution16

Evidence of use of appropriate analysis techniques17-21

Design

Brief overall system description22

Overall system design – IOPS chart23

Modular design – Form/navigation23

Data dictionary & validation required (Proposed system) 24

Data volumes/volumetric28

Definition of record structure30

Database design including normalized relations31

Normalized tables31

Entity relationship diagram33

Potential SQL queries33

Identification of storage and backup media35

Algorithm design36

Class definitions45

Brief class outline46

Inheritance47

More inheritance & user defined custom controls48

Use of polymorphism50

Other classes50

Use of abstract data structures51

User interface rationale52

User interface design52

Security & Integrity55

System security55

System Integrity56

Testing strategies57

Test plan58-65

Technical Solution

Fully coded solution66 - 159

System Testing

Testing160

Integration testing169

Testing cross reference171

Trace Tables216-223

System Maintenance

System overview234

Brief overall system description234

Level 1 DFD235

Modular system structure236

Class overview237

Detailed E-R diagram238

Form overview238

Detailed form navigation239

Solution overview/class explanation240

Description of each class241

Description of each form260

Detailed algorithm design274

Data definition language (DDL)297

SQL tables design view298

List of descriptive system configurations300

User Manual

The user manual (33 pages) is included in the documentation, but it is numbered separately.

Appraisal

Objective analysis301

User feedback303

Feedback analysis307

Extension - Improvements 308 - 311