



**GCE AS/A level**

1102/01

**COMPUTING CG2  
AS EXTENDED TASK**

Summer 2012

### **GUIDANCE FOR CANDIDATES**

You are expected to:

1. Read and analyse the given scenario and develop a solution which may be enhanced by making any assumptions you see fit. Any assumptions you make should be clearly explained and justified in your documentation.
2. Produce a solution which **MUST** include original coding. Solutions which do not include original coding will not be acceptable.
3. Produce a fully documented solution to the given problem in accordance with the requirements listed in CG2 (pages 17-19 and pages 41-51 of the specification). Credit will be given for the quality of your solution.



## *Greenparks School Reward Scheme*



Many schools have introduced reward schemes as a strategy to motivate their pupils and to encourage good behaviour. The headteacher of Greenparks School has decided to set up such a scheme that she hopes will encourage the pupils to improve their attendance and behaviour and lead to an overall improvement in the school's results.

For example, pupils will be able to earn reward points for:

- Good attendance at school
- Good behaviour in lessons
- Working hard in class
- Gaining good marks in tests and examinations
- Taking part in sporting and musical activities
- Representing the school in competitions and events
- Taking part in after school clubs and activities
- Taking part in activities such as litter patrols and community based projects.

Points may be deducted for poor behaviour.

Points will be added to or deducted from a pupil's account by a form tutor, subject teacher or head of year.

Pupils will be able to view their own account.

The Greenparks Reward Scheme will work by allowing the pupils to redeem their points for rewards that can be chosen from the given options.

The headteacher has commissioned you to create a computer based system which will:

- Allow users to log in either as staff or pupil
- Allow staff to add points to or deduct points from a pupil's account
- Display a pupil's points balance
- Display the reward or rewards available for a pupil's current points total
- Update a pupil's points total when rewards are redeemed.



## Greenparks School Reward Scheme



<i>Reward</i>	<i>Points needed</i>
Set of pens	25 points
Football	50 points
CD voucher	60 points
Memory stick	100 points
Ice Skating	110 points
Computer Game	150 points
Driving lesson	250 points
Digital camera	300 points
MP3 player	400 points
Games console	500 points