

CS Games 2016



Web Competition

Participants	2
Workstations	1
Value	5%
Duration	3 hours

DomeRoad

Rebels, the Empire is exhausting the Earth's resources, harvesting all available energy from our surroundings, killing us with their militias... The time has come for us to coordinate our efforts, lest we surrender our freedoms and our lives. Our factions' only hope for survival is to lend one another a helping hand.

Our foremost concern is the need for a method of operation which renders us invisible to the Imperial Council's eyes.

We have received intelligence regarding the Empire's newest link in this long chain of oppression...



Problem Description

The Empire needs your help to create the very first trading platform for Dome's Intranet.

Such an application will allow users to :

- ☐ Post an item to sell
- ☐ Buy and place bids on items
- ☐ View a list of items for sale
- ☐ View previously purchased items
- ☐ View details about items for sale

Welcome Page

The welcome page must at the very least display the following :

- ☐ Link to **Auction House**
- ☐ Link to **Profile Page**

Aside from its functional aspect, the homepage must necessarily provide an enjoyable user experience, so be creative. You are representing the Dome after all !

The link to the **Profile Page** requires a user to enter his or her **username** and **password**.

Auction House

This section allows users to view all items currently being sold. For each item the following information is displayed :

- ☐ Picture
- ☐ Description
- ☐ Seller's name
- ☐ Link to the item's **Details Page**
- ☐ The type of auction :
 - ☐ Auction
 - ☐ Fixed price
- ☐ Price

For a **fixed price** sale, the **price** is simply the cost (in **credits**) of the article. In case of an **auction**, it represents the current highest bid.

User Profile

This section provides the following to a user :

- ☐ View items currently for sale
- ☐ View history of previously sold items
- ☐ View history of previously purchased items
- ☐ View number of **credits** in the account
- ☐ A mechanism to add new credits to his account. **Surprise us !**
- ☐ A mechanism for putting a new item up for sale

When a user puts an item up for sale, the following information will be required :

- ☐ Name of the item
- ☐ Description
- ☐ Picture(s) of the item
- ☐ Type of sale : **fixed price** or **auction sale**

When an **auction** is created, one must be able to specify the duration of the auction. Once this limit has been reached, the sale must conclude automatically, and the user with the highest bid wins.

Article Details

This section allows potential buyers to view the following information :

- ☐ Name of the item
- ☐ One or more pictures of the item
- ☐ A **detailed** description
- ☐ Price or current highest bid
- ☐ Type of sale
- ☐ Name of the seller
- ☐ A mechanism to purchase the item

In the case of a **fixed price** sale, the buying mechanism allows a user to immediately purchase an item for its listed price. The value of the price at time of purchase is subtracted from the buyer's current **credits**. A user cannot purchase an item whose price is higher than his or her current amount of credits.

In an **auction** type sale, a user can place a bid on the item. The bid's value must be greater than the current highest bid. When this occurs, the user's credits are depleted in the amount of the bid. A user cannot bid more credits than are available in his or her account. When an auction ends, the user with the highest bid has bought the item.

When a user places a bid on an item, the user with the previously highest bid has his credits restored in the amount of this old bid.

CALL TO THE REBELLION

Beware the hidden motives of the Empire! This newest chapter in a veritable atlas of oppression and deceit only serves to further diminish our freedom...

There exists, however, a glimmer of hope at the end of this darkened tunnel, for we now have the means to turn these weapons against their masters. There is much to be gained from the Empire's latest initiative, if only we could operate under cover from the ever watchful eye of the Imperial Council. Faithful rebel, we need your help.

You are certainly aware that the Rebellion provides its comrades with the tools used to fight. We need a way to benefit from the Empire's trading platform without the risk of detection.

What we are asking of you is a way to hide in plain sight. Provide us with a secret mechanism that will allow us to trade our resource, usable only by those who know the ruse. **Be creative !**

Note : explain your method in a `readme` file.