

Web Programming Final Research

Handong Market Place

Team 1

YUGAY DMITRIY [21900844], TOMAREVA DARIA [22100759],
TOMAREV VASILII [22400838], LYABLIN LEONID [22400237]

Dec-08

<https://handong-harvest.netlify.app/>

1. Purpose and Planning

Before our first gathering as a team, we spent time working individually on the idea's generation. Although we had an overall topic "Handong Global University", our goal was to find a topic that has the potential to create a strong brand identity, while being closely related to the HGU and most importantly helpful to the Handong community. In this way, our initial list of ideas included such titles as "Handong Yesod website", "Handong Bucket List", "Handong menu book", and "Handong Marketplace". The first idea suggested creating a website for the Yesod coffee shop located on campus, as this place has a brand and story behind it, which could be interesting to organize and post on the website. The second idea focused on creating a bucket list for a Handong student, listing places to visit and activities to do. The next idea suggested gathering all the data from various dining places and displaying the dishes that are served, with a description and ingredient listing, which would require extensive research. Finally, one of our members proposed the idea of creating a website for Handong marketplace where Handong community can be "buying, selling, and sharing goods and services easier, safer, and more convenient." After some discussion, debate, and voting, we decided to work on the last idea and create a platform for Handong shop. We took various existing platforms, such as Carrot, eBay, Lalafo, and Avito for reference and started gathering necessary information about functions and features that websites of this format usually have. Next, during our meeting, we came up with possible titles for our Handong shop. Among other ideas, there were names like "Honor Shop", "Handong Retail", "Faithful Steward", and "Grace Exchange". However, after considering all the pros and cons in terms of design, simplicity, and catchiness, our team landed on the name "Harvest". As we introduced on the "About Us" page, the name "Harvest" reflects our goal: creating a place where you can gather what you need, share what you have, and grow together as a community. Whether you're earning money, saving on essentials, or connecting with others, Harvest is here to make your Handong experience even more exciting and rich. The final proposal statement for our project sounded like this: "Harvest - It's a marketplace for all Handong people, where you can sell your goods and services." The next step of preparation was planning out all the possible pages that we wanted to include in our project. Thus, we came up with rough ideas for 5 pages, plus a categories page. You can see our planning process notes below.

PAGES:

▼ Main page intro

scroll to the main layout (categories, products)

header fixed

- right side: like, login/sign in, +Post

footer

- about, user policy, support

- contact us - sns icons

CATEGORIES:

Books

Electronics

Clothes & Accessories

Services

Food & Coupons

Lost&Found

Free

Others

▼ Login page:

- via school email

Communication:

- personal message to sellers

Transactions:

- people meet and transfer in person

► Favorites page:

► Profile page:

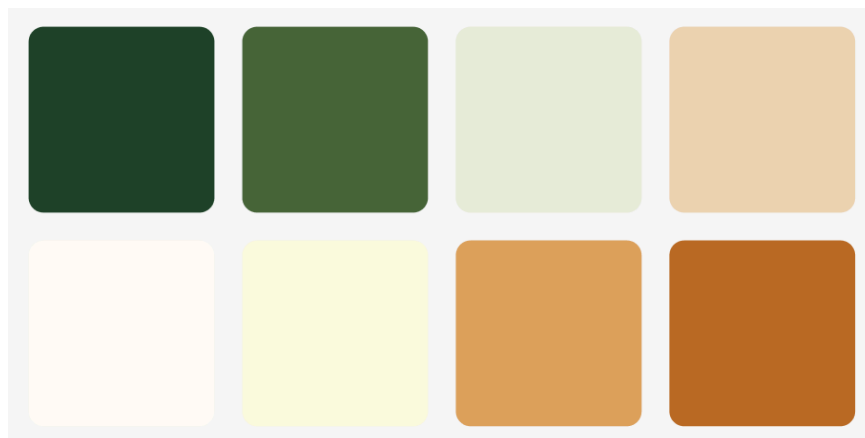
▼ Post page:

- Add pictures (0/10)
- Title
- Listing type
 - For sale
 - [checkbox] Open to offers
 - Free
 - Lost&Found
- Description
 - Tell us about your item e.g. brand, material, condition and size.
 - Include anything that you think your neighbors would like to know.
- Where to meet
 - Location in Handong

:: Loading animation?

To briefly go through these notes, at this stage we organized our ideas and outlined specific elements along with their characteristics, such as header, footer, and buttons. We also decided on the product categories and even gathered ideas for the lines and features that would be great to display on certain pages. This was our starting point for the coding part.

For the design, we decided to start by developing the branding. Since our project is called "Harvest," it made sense to use warm green and brown tones. To find suitable colors, we used two websites: [Coolors](#) and [Color Hunt](#). The final selection looked like this:



The primary colors chosen were **#1F4529** for the main color of objects, **#FFFEF5** for the background color, **#000000** for the font color; **#47663B** and **#BC6C25** for the logo colors and **#FEFAE0** for the secondary background color

For fonts, we considered various options such as Basique Pro, Montserrat, Century Gothic, and others, but ultimately chose **Jost** — a modern geometric font with a free license, inspired by the Futura style and grotesques of the 1920s. It includes multiple weights (from thin to black) and supports Latin, Cyrillic, and other languages. The SIL Open Font License 1.1 allows free use of the font in personal and commercial projects.

Next, we began developing the logo. The main task was to create a simple logo that would intersect with the Harvest name and have different variations. Various fonts were considered.



And then we began developing various options



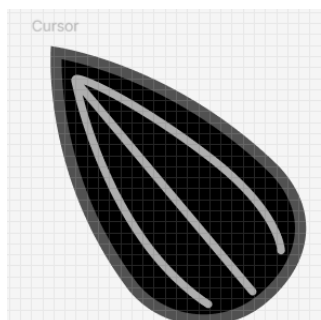
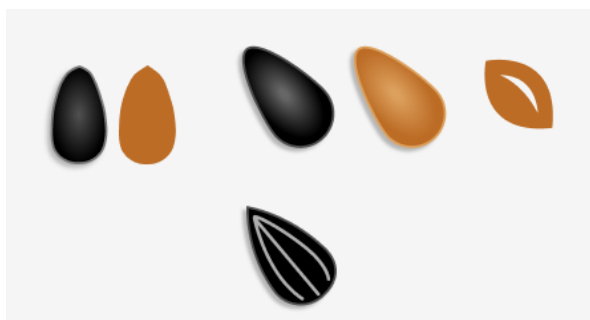
The final version



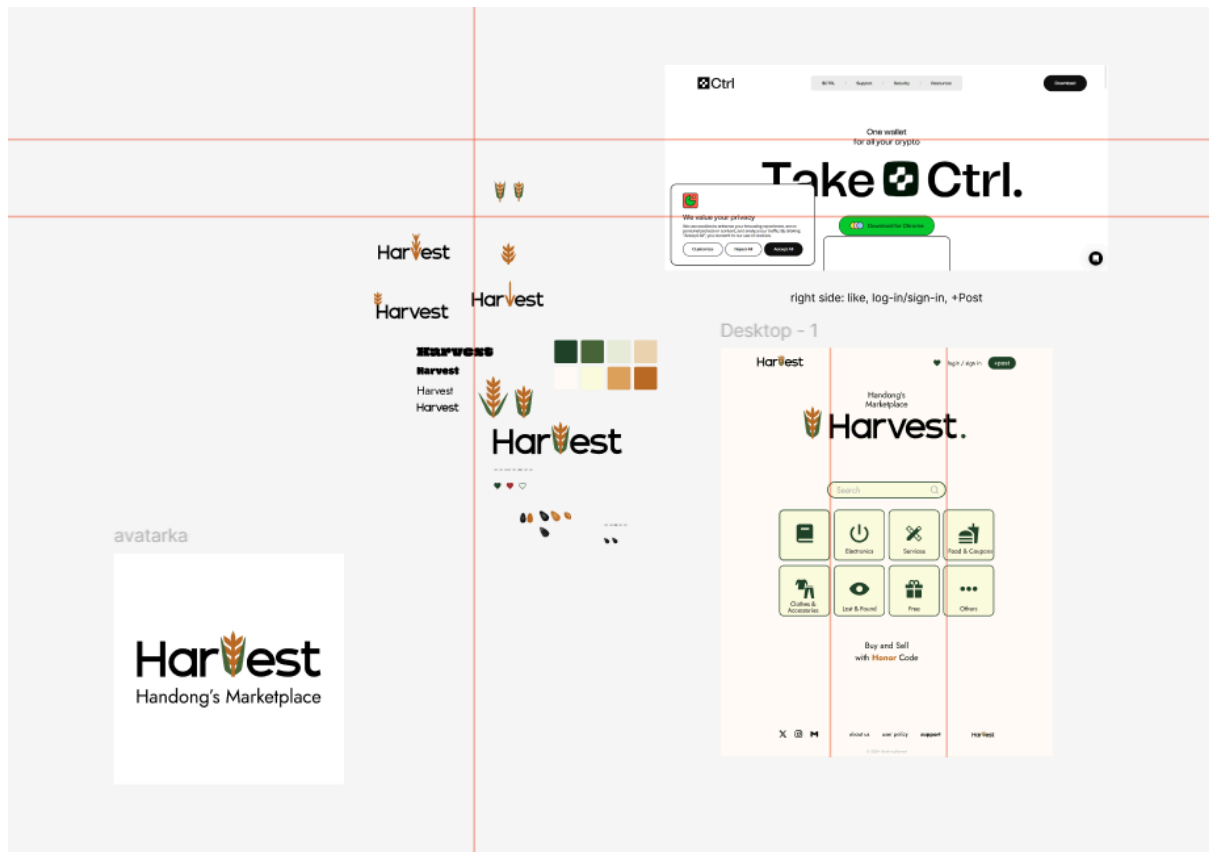
Next came one of the final stages of design planning – the development of the layout.



And also during the planning process, we decided to try changing the cursor design (on the left). And the final version (on the right)



Our Workspace on Figma



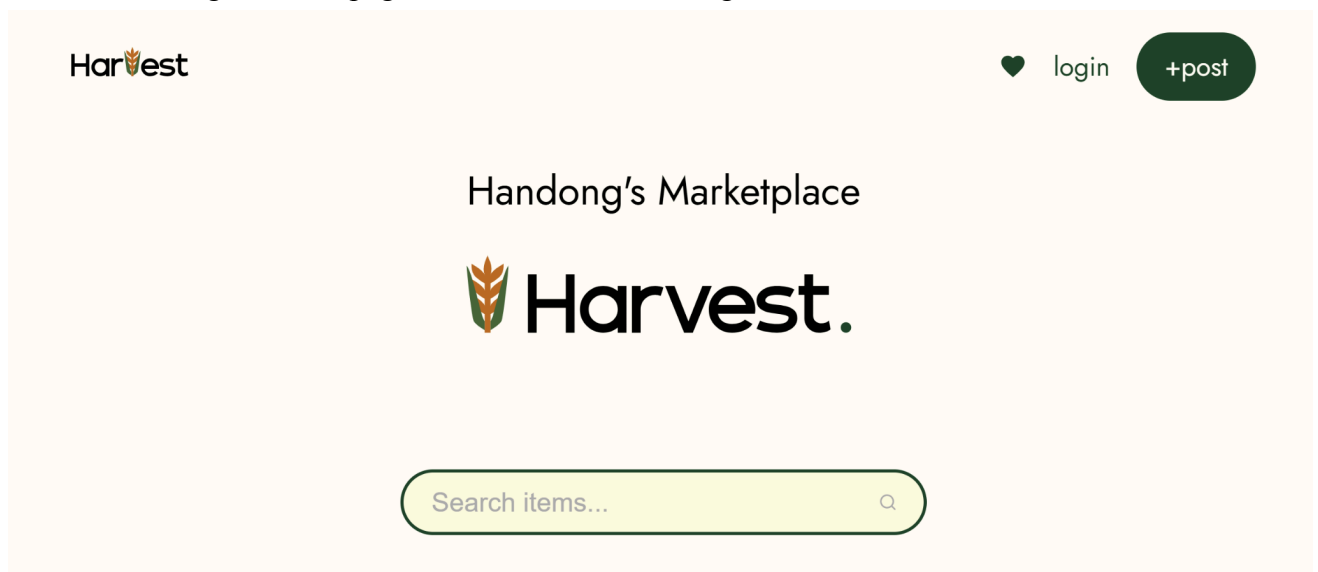
2. User Manual

Provide a detailed explanation of all menus and user experience elements.

Use screenshots + explanatory text (covering content, design, and user interaction).

If necessary, include code snippets in a highlighted box with explanations.

Avoid dedicating an entire page to code without meaningful context.





Buy and Sell with **Honor** Code

   [about us](#) [user policy](#) [FAQ](#) [honor code](#) 

© 2024 HandongHarvest

1. Like (Favorite page) Functionality

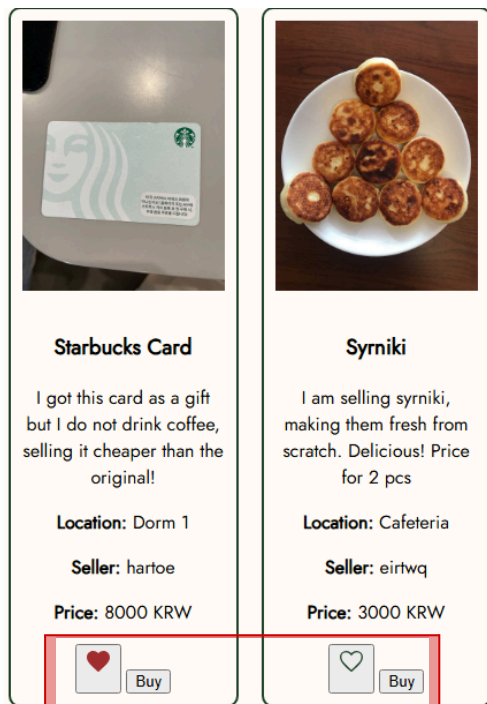
The heart image in the header acts as a button that directs the user to the favorites page, where they can view items added using the heart button (which turns red when pressed). Each item is displayed with the heart button below its description in the corresponding category. Since all items are stored in local storage, the JavaScript function simply transfers this object to the favorites page.



Your Favorite Items

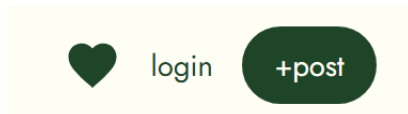


To use the website, the user must be registered; if they are not, pressing the button redirects them to the login page. Items can easily be removed from the favorites page by pressing the filled heart button. The JavaScript function then removes the corresponding object from the favorites storage. If the user clicks on a product, they are redirected to the item detail page, where they can view more detailed information about the item.



2. Login functionality

This login function is required for users to access certain features on the website, such as posting items or adding products to their favorites.



Users need to enter their email or username and password. When they submit the form, JavaScript functions like `.trim()` remove any extra spaces from the input, and `.toLowerCase()` ensures that the email comparison is case-insensitive. The entered details are then checked against the stored user data in the users array. If the login is successful, the user's session is saved in **localStorage**, and they're redirected to the main page (**index.html**).

If the credentials are incorrect, an alert will let the user know that either their username, email, or password is wrong. There's also a link that takes users to the **register.html** page if they don't have an account yet. The registration process ensures that user interactions are safe, secure, and personalized. By creating an account, users can safely access specific features and store their preferences.

Login to Your Account

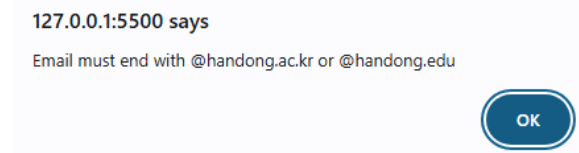
Email or Username

Create Account

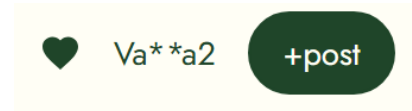
Email

Enter Handong Email

Additionally, to maintain security and ensure that legitimate users use the platform, we have set a requirement for registration: users can only register with email addresses that end in **@handong.ac.kr** or **@handong.edu**. This helps us verify that the users are affiliated with Handong University.



The login page follows the same design style as the rest of the website, using external CSS files for consistency. Only logged-in users can interact with specific features like posting items (**post_item.html**) or adding to favorites (**favorites.html**).



3. Post Functionality

The **post-item** function allows logged-in users to post new items on the website. If a user tries to access the **post_item.html** page without being logged in, they will be automatically redirected to the **login.html** page to ensure that only authorized users can post items.

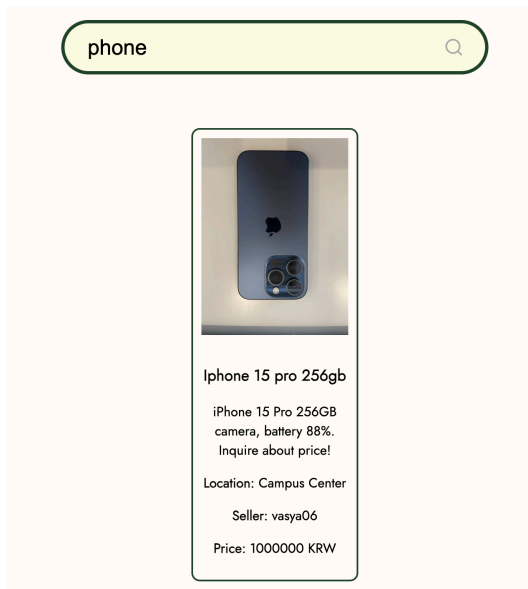
On the **post item** page, the user fills out a form with several fields, including title, category, description, location, and image uploads. The form also includes options to select whether the item is for sale or if the seller is open to offers. If the user selects "for sale," they are prompted to enter a price for the item, and a checkbox lets them indicate whether they are open to offers.

The page dynamically adjusts based on the user's input. If the listing type is marked as "for sale," the price field will appear. If the user chooses another listing type (such as "free" or "services"), the price field is hidden.

When the form is submitted, the entered data is captured, and a new item is added to the **postedItems** array under the correct category. The item data includes the title, description, image (if uploaded), location, listing type, price (if applicable), and other relevant details. The information is then stored in **localStorage**, allowing the item to be saved for future reference.

Once the item is posted successfully, the user receives an alert confirming the action, and the form is reset, clearing all fields. The price field also hides again if it was visible.

The **post item** page follows the same design as the rest of the website, providing a consistent user experience with the help of external CSS files. Only logged-in users can access this page, ensuring a secure and personalized platform for item postings.



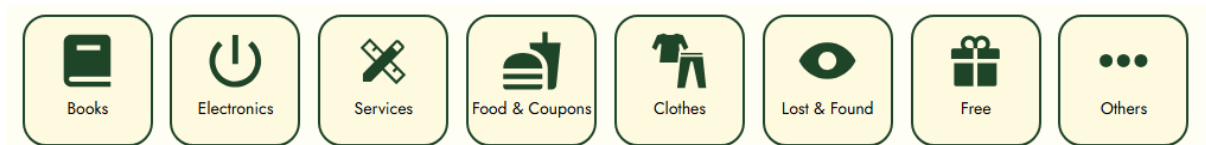
4. Search

This element is a search function. This element was made by using a textbox. When entering the desired word (for example - phone), the website gives all the products belonging to this category, allowing users to search for the desired objects more easily. The creation of this element required us to use several js functions, such as **trim()** and **toLowerCase()** to make the user experience as simple and self-intuitive as possible.



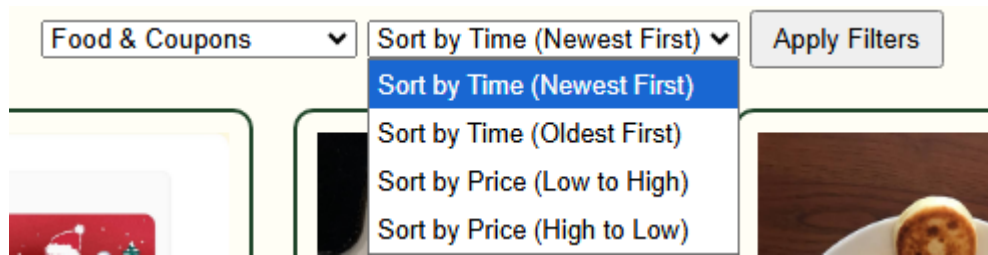
5. Categories

The **category page** allows users to view and filter items based on different categories. This page automatically loads when a user visits it and displays the available categories, such as **Books, Electronics, Clothes & Accessories, Services, Food & Coupons, Lost & Found, Free, and Others.**



The user can choose a category using a dropdown menu at the top of the page. By default, all categories are displayed. Once a user selects a specific category, only items in that category will be shown. The page also includes a **sort option** to organize the items by time or price. Users can choose to sort the items by **Newest to Oldest** or **Oldest to Newest** and **Price (Low to High)** or **Price (High to Low)**

Once the user selects the desired filters and clicks **Apply Filters**, the page updates to show only the filtered items.



The items themselves are fetched from a **JSON file** containing the data for each category. The system retrieves this data, processes it, and displays the relevant items on the page. If there's no category selected, all available items across all categories are shown.

To add more interaction, each item can be **liked** by clicking a heart icon. If the user is not logged in and tries to like an item, they will be redirected to the login page.

Finally, if the user wants to post their own item, they can click the **+post** button in the header to be taken to the **post item page**.



This category-based layout helps users easily browse through different items and find what they are looking for, with the ability to filter based on their preferences.

6. Footer

Footer part included several elements, all of them being interactive features.

- A. Social media icons that are providing users with channels for communication with the developments, sharing their issues, ideas, and suggestions.

Three social media icons: Instagram (camera icon), X (bird icon), and Messenger (M icon), all in black.
- B. About Us link, which leads users to the page with the welcoming, introductory speech. This page explains the project and the ideas behind it, sharing the vision of Harvest.

A yellow rectangular button with the text 'about us' in black.

About Us

Welcome to Handong Harvest!

We are the Handong Harvest team, and we created this platform to make buying, selling, and sharing goods and services easier, safer, and more convenient for our university community. Harvest is exclusively for Handong-related individuals—students, staff, and faculty—so every interaction happens within a trusted circle. This means exchanges are not only simple and nearby but also safe, as you're always dealing with fellow Handong members.

Our idea grew from the challenges many students, especially international ones, face when navigating marketplaces outside of the university. Language barriers, cultural differences, and unfamiliar systems often make it hard to connect and find what you need. Harvest bridges that gap, offering a space where both Korean and international students can connect in English and Korean, share resources, and support one another.

True to the spirit of Handong University and our Honor Code, Harvest is built on trust, honesty, and integrity. Whether you're looking to sell a textbook, offer tutoring services, or give away something for free, Harvest ensures a safe and respectful environment for all.

The name Harvest reflects our goal: a place where you can gather what you need, share what you have, and grow together as a community. Whether you're earning money, saving on essentials, or connecting with others, Harvest is here to make your Handong experience even more exciting.

Let's harvest together!

- C. User Policy link, which leads to the page with the instructions for both sellers and buyers of Harvest. It talks about the integrity and key values that our project believes in.
- D. FAQ link, which leads to the page with several possible questions that

user policy

FAQ

User Policy

For Sellers

As a seller on Harvest, your role is to provide goods and services with integrity, aligning with the Handong Honor Code. This means being honest and transparent about the condition, quality, and details of the items or services you offer. If there are any defects or issues, they must be disclosed clearly to potential buyers. Pricing should fairly reflect the quality of the product or service you are offering. By demonstrating integrity and faithfulness in your transactions, you contribute to fostering a marketplace built on trust and respect, helping to strengthen our university community.

For Buyers

As a buyer, you are expected to uphold the values of honesty, respect, and responsibility outlined in the Handong Honor Code. While we ensure a safe and secure platform, your integrity plays a vital role in creating a positive marketplace experience. Be clear and respectful in your interactions with sellers, and follow through on your commitments. Since Harvest does not disclose personal information, you are encouraged to communicate responsibly and fairly. By engaging in free and honest exchanges, you contribute to a supportive community that reflects the Christian spirit and values of Handong.

users might have when they want to use the Harvest website. We included questions regarding the posting and buying of products, as well as concerns that may appear when dealing with personal information.

FAQ

1. **Q: Who can use Handong Harvest?**
A: Only Handong-affiliated individuals (students, staff, faculty) can use Harvest.
2. **Q: How do I register?**
A: Go to the register page, input a username and password, and you're set!
3. **Q: How do I post an item?**
A: Click "+post" on the homepage after logging in, fill in the form and submit.
4. **Q: How do I contact the seller?**
A: Items display seller's username. You can message them directly (in real scenario you'd have a DM, but for now just meet in campus).
5. **Q: How can I change my password?**
A: Go to your profile page and use the "Change Password" feature.
6. **Q: What if I forgot my password?**
A: Currently, contact admin or register a new account. (Demo limitation)
7. **Q: Are there any fees?**
A: No, Harvest does not charge any fees. Transactions are between users.
8. **Q: Can I post multiple items?**
A: Yes, you can post as many items as you like.
9. **Q: What if an item is lost or found?**
A: Use the Lost & Found category to post about it.
10. **Q: Can I trust the sellers and buyers?**
A: Harvest is limited to the Handong community. We encourage following the Honor Code and being honest and respectful.

E. Honor Code link, which leads to the page with the respective name.

This page reflects the core values of integrity, honesty, and community spirit central to Handong Global University and Handong Harvest. By emphasizing the Honor Code, we aim to create a trustworthy environment where students can confidently engage with one another. This ensures that the marketplace operates with respect and accountability, aligning with the Christian principles that guide our university.

honor code

Handong Honor Code

Preamble

Handong Global University has a mission to foster 21st-century leaders who change the world and its nations with the Christian spirit. A distinguished life of integrity and virtue is required of such leaders. The Handong Honor Code stipulates how to live a sanctified life that is pleasing to God in all spheres of life. Its fundamental purpose is to foster distinguished leaders with both academic excellence and Christian character. Through the Honor Code, all people of Handong contribute to achieving the vision of Handong Global University. Accordingly, all students, faculty, and staff are responsible for maintaining and developing this Honor Code.

"Do not conform any longer to the pattern of this world but be transformed by the renewing of your mind. Then you will be able to test and approve what God's will is - his good, pleasing and perfect will."

Romans 12:2

Handong Honor Code

1. The people of Handong take responsibility for all we do, say, and write.
2. The people of Handong are honest and faithful in our academic and social lives.
3. The people of Handong help and serve others with humility.
4. The people of Handong sacrifice ourselves for others.
5. The people of Handong respect the personal dignity and rights of all members of the community.
6. The people of Handong value and respect the property of others and the university.

Buy and Sell

with **Honor** Code

It is important to mention that the text on the main page presented above, also consists of the link implemented with the word "Honor" leading to the same Honor Code page.

3. Identify which parts require regular updates to stay current.

To keep website updated, we will have to track most popular items and display them on the main page. We will also have to keep updating FAQ with the questions actually relevant to the users.

To further improve the site in the future, we plan to add/improve:

- **Seller ratings and customer reviews** - this will help users avoid negative experiences, create transparency, and also encourage sellers to strive for improvement
- **Categories** - add more categories for various products, such as stationary,
- **Location - Handong or off-campus** - this will allow sellers to specify an exact location for a more convenient user experience
- **Internal chat** - the ability to communicate between seller and buyer
- **Interaction statistics** - sellers and buyers will be able to see product statistics such as number of likes, views, and how many people have written about it
- **Reserved** - if a seller and user have agreed to meet, the seller can indicate that the item is reserved, and this will not confuse other people
- **Translation** - the ability to translate the site into other languages (Korean is a priority)
- **Avatar** - the ability to upload a photo to the user profile
- **Hashtags** - expands search capabilities

We believe that these updates will significantly improve the user experience (UX) and user interface (UI), making the platform more intuitive, user-friendly, and pleasant for all students, professors, and other HGU personnel.

4. Licence Information

All website elements and pictures were made by us; therefore they do not require any licensing.

5. Contributions

Dmitriy - mostly backend and logic of the website's login/registration, posting items, footer and pages to display pages: about, policy, honor code, faq, writing the report.

Vasilii - backend and frontend; logic and style for the page for favorite items; profile page; login/registration page css styles, writing the report.

Leonid - Main design development for the website; svg icons; logos; cursor; basic outline of the website, writing the report.

Daria - Researching, brainstorming, preparing 30+ pictures for the items; design outlines of the website; website user policy, faq page, and description about Handong Harvest, writing the report.

6. Contact Us

Project Github Repository:

<https://github.com/yudm3/Handong-Market>

Team Members:

- YUGAY DMITRIY [21900844]: 21900844@handong.ac.kr
- TOMAREVA DARIA [22100759]: 22100759@handong.ac.kr
- TOMAREV VASILII [22400838]: 22400838@handong.ac.kr
- LYABLIN LEONID [22400237]: 22400237@handong.ac.kr