

TalTech

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## **Product Checker**

Home project in subject Building Distributed System (ICD0009)

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# 1 Application overview

## 1.1 Introduction

Product checker is an application which tracks a certain websites product and notifies the user when a product has dropped price, or his size is available.

Now there are a lot of typical price checkers like Honey, but honey has limitations only to stores which allow honey. This application scrapes this data using selenium on any website using headless Firefox or headless Chrome. The application will have built in price detection systems, but in case that fails a user can input his own xPath or CSS-selectors when needed – this allows greater flexibility find data in case of failure on its own.

Applications strong points are that it allows to add custom checkers. For example if a product has some sort of color options, size options, etc. User can add to an existing configuration a personalization item, which will keep track of the selector. Allowing the app to check very specific things. Another strong points is to create pre-built configurations for specific companies, so a user doesn't have to configure same site things twice.

The application will have a possibility to keep track of a websites main page as well called news – this is handy for if waiting for new items to release and want to be the first to be notified of it. Let's be honest none wants to subscribe to every websites newsfeed.

## 1.2 Flow

1. User finds URL to scrape.
2. User adds configuration for specific website (Default configuration or Custom)
  - Custom allowing to add specific css / xpath selectors, which the app will use.
3. User will add this configuration to a product which will hold the URL as well.
4. Website displays data about the product (data being price, size, color, image, availability)
5. Application will periodically run itself to find necessary data from webpage.
6. When price drops or fails to fetch – User gets notification to his email address or displays on the webpage that something happened.

## 2. Visuals

Example of single product visual – may subject to change.



### 3. ERD

