

# Minizic Project

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## 1 Project Description

Many a times we face a lot of difficulties while buying things online, as some of the shops have a higher shipping cost, some of them have a higher product cost.

We have come up with a solution by our project where you can purchase online, any products where our project will provide you the best results optimizing the product and shipping cost.

We have arranged the project in two ways. One can have two kinds of needs, one for the family, where more products needed to be bought with less price and one for a single individual whose target is to buy smaller products for personal or single use only.

We have used minizinc to model the project and pymzn to take input from user so that an user can select which package he or she needs. When we run the python file, one user will be asked which package he wants to get, where number 1 will be a family package and number 2 will be a single package.

When if user presses 1, he will be returned the best result where cost is optimized. Pressing 1, the python file will be calling the `co1.mzn` (Cost optimization) file and related `.dzn` files.

Pressing 2, the python file will call the `so1.mzn` (size optimization) file and associated `.dzn` files. In this way we have tried to create an online purchase system where two types of packages will be provided to any user and an user can select his or her required package. We have used, pymzn, minizinc to build this project.

## 2 How to run the project

We need to have any python compiler installed in the device. Next we need to install pymzn in order to run the `.mzn` files. There is a file named `final.py` provided, after following and completing the above steps if we run the file `final.py`, the project will be running. We have to change the name if the `.dzn` files inside the `final.py` as per the requirement, the `.mzn` files will remain unchanged.