

| SHARED ACTIVITIES | DESCRIPTION | SCENARIO | ENVIRONMENTAL ADVANTAGES | STUDENT ADVANTAGES |
|----------------------|--|---|---|--|
| Meal sharing | Meal sharing is a shared activity that allows students to invite their flatmates to a meal inside the flat. The meal can be either delivered or self-made. | Beth lives in a flat of a student residence hall. After an exhausting day at the university, she would like to have some fun in the evening. If Beth had our design solution, she could easily plan a dinner with her flatmates proposing some dishes to cook together. | <ul style="list-style-type: none"> Reduction of consumptions | <ul style="list-style-type: none"> Opportunity to socialise with the other flatmates Improved flat coordination |
| Food sharing | Food sharing is a shared activity that allows students to share food with their flatmates. | Students in a flat of a student residence occasionally buy pasta in the groceries. However, they do not eat much of it, and so they purchase 500gr-pasta packages. If they had our design solution, they could easily share pasta and consequently buy large-quantity packages rather than only 500gr ones. Given that large quantity food packages cost less than small ones than they would save money. | <ul style="list-style-type: none"> Reduction of package waste as a single food package satisfy the needs of the whole flat rather than a single flat member. | <ul style="list-style-type: none"> Reduction of expenses as large-quantity food packages are cheaper. Improved flat coordination |
| Online order sharing | Online order sharing is a shared activity that allows students to share their online orders with their flatmates. | Beth lives in a flat of a student residence hall. She orders her grocery online every week, paying an extra fee for the delivery. Her flatmates follow suit. However, if they had our design solution, they could easily share their grocery deliveries saving on the delivery fee. | <ul style="list-style-type: none"> Reduction of emissions and resource consumption as one delivery satisfies the needs of a whole flat rather than a single flat member. | <ul style="list-style-type: none"> Reduction of expenses as delivery fees diminish or quantity discounts are applied. Improved flat coordination |
| Appliance sharing | Appliance sharing is a shared activity that allows students to share their flat appliances contemporaneously. | <p>Beth and Marco are two flatmates in a student residence hall. Beth plans to use the oven at 7 pm for cooking roast beef. Marco plans to use the oven at 8 pm for cooking lasagne. Both flatmates do not have a fixed schedule and are not aware of the other flatmate's plans for the dinner.</p> <p>If Beth and Marco had our design solution, they would know the plans of each other and consequently could agree on the time to share the oven.</p> <p>Beth and Marco have two advantages stemming from our proposed design solution. Firstly, they could save on the energy bill as the oven would cook two dishes at once. Secondly, it is an opportunity for Beth and Marco to know better each other and have some fun together.</p> | <ul style="list-style-type: none"> Reduction of consumptions as appliances are used contemporaneously by multiple flatmates. | <ul style="list-style-type: none"> Reduction of bill costs Opportunity to socialise with the other flatmates Improved flat coordination |

| | | | | |
|-----------------------------|---|---|---|--|
| Nearly food expired sharing | Nearly-expired food sharing is a shared activity that allows students to communicate their flatmates that there is some nearly-expired food that they can consume for free. | Beth lives in a flat of a student residence hall. She has recently bought too much food and cannot consume all of it before the expiration date. Consequently, Beth will throw out part of its grocery. However, if Beth had our design solution, she could communicate her flatmates that she has some nearly expired food that they can consume for free. | <ul style="list-style-type: none"> Reduction of food waste | <ul style="list-style-type: none"> Boost in self-esteem by being aware of doing the right thing and feel less responsible for the current environmental problems Improved flat coordination Free food |
| Cleaning sharing | Cleaning sharing is a shared activity that allows students to clean the shared spaces of the flat contemporaneously. | Students of a flat in a student residence hall are willing to clean the shared spaces. However, during their busy university days, they would like to have some rest or some social interactions as a break from their study duties rather than cleaning. If they had our design solution, they could easily clean and have social interactions at the same time as they could plan shared cleaning sessions. | <ul style="list-style-type: none"> Reduction of consumptions as students may feel worried to be judged by the other flatmates if consuming a large number of resources. Besides, overlapping cleaning tasks are avoided. | <ul style="list-style-type: none"> Opportunity to socialise with the other flatmates Improved flat coordination |
| Item Sharing | Item sharing is a shared activity that allows students to ask whether they can borrow some objects from their flatmates. | Beth lives in a flat of a student residence hall. She needs a stapler to join some pages. Thus she orders it online. If she had our design solutions, she could, before the purchase, easily ask the other flatmates whether they have a stapler and can lend it to her. | <ul style="list-style-type: none"> Reduction of goods consumption as flatmates can share their possessions and borrow others' objects. | <ul style="list-style-type: none"> Reduction of expenses Construction of a helpful flat network in case of needs Improved flat coordination |
| Group exercise | Group exercise is a shared activity that allows students to work out together walk or ride a bike together with their flatmates. | Beth lives in a flat of a student residence hall. After a busy week at the university, she would like to be outdoors walking in nature on the weekend. However, she does not want to carry out this activity alone. If she had our design solution, she could easily invite her flatmates. | <ul style="list-style-type: none"> Reduction of consumptions as activities are carried out outdoors. | <ul style="list-style-type: none"> Opportunity to socialise with the other flatmates and to conduct a healthy lifestyle. Improved flat coordination |
| Carpooling | Carpooling is a shared activity that allows students to share car journeys. | Beth and Marco are two flatmates in a student residence hall. Marco plans to use his car on Wednesday for some errands. Beth, instead, intends to run her errands on Thursday. Both Marco's and Beth's errands can be shifted to another | <ul style="list-style-type: none"> Reduction of emissions and resources consumption as one car is used for satisfying the needs of multiple | <ul style="list-style-type: none"> Opportunity to socialise with the other flatmates Reduction of expenses as flatmates can share the fuel expenses |

| | | | | |
|--|--|---|---------------------------------|--|
| | | day. If they had our design solution, they could easily agree on the date to run their errands together and have some fun at the same time. | flatmates rather than only one. | <ul style="list-style-type: none">• Improved flat coordination |
|--|--|---|---------------------------------|--|