IMAGINE IOT
PROTOTYPE CHALLENGE

MY LETTERBOX PROTOTYPE

BY: EKANTO GHOSH
Summary:

The custodians of letter boxes (a receptacle for receiving incoming mail at a private residence or business) and post office boxes (a uniquely addressable lockable box located on the premises of a post office station which can be rented by the citizens and is also called PO Box) need a solution to be notified when they receive a letter in their respective letter box or PO box.

Storyline:

The citizens of a city use letter boxes at their residences or rent a PO Box at the post office to receive letters or mails.

It is an overhead to check regularly (daily or weekly) for received mails or letters at the letter box or PO Box, more so, if the post office is far from the home. Also, it is a waste of human effort to check an empty letter box or PO Box for mails or letters.

Therefore, the citizens need a system which notifies them if they have received a mail(s) in their letter box or PO Box. This would free citizens from regularly checking the letter box or PO Box. It would also be beneficial for those citizens who do not regularly check or forget to check their letter box or PO Box.
**Persona**

**Persona 1**

**AMY**  
**PO Box User**

“I hate driving all the way to the post office to find that I have not received any mail in the PO Box I rented.”

**About**
- 27, single, university scientist.
- Her university reimburses the charge of renting PO Boxes by the employees to reduce the large number of mails that the university receives.
- Being deeply involved in research, she has to take time out to drive to the post office (to collect her mail from the PO Box) which is far from both the university and her home. She sometimes misses visiting the post office too due to her busy schedule.
- She usually gets mail from other universities or the Government in the form of invitations for conferences, journals, etc. Her parents and friends residing in a different city also mail her during special occasions like Christmas or her birthday.

**Responsibilities**
- To keep the research at the university on track.
- To receive and respond to official communication from the Government or other universities in time.

**Needs**
- Needs a way by which she collects the letters/mail delivered to her in time.
- Prevent loss of time and energy to visit the post office to check the PO Box and finding it empty (no mail).
- Prevent incidents of missing to collect mail from the PO Box at the post office.

**Main Goals**
- Being able to carry out her research effectively.
- Better response time to mails sent to her PO Box.

**Pain Points**
- No way to know if a mail has arrived or not arrived at the PO Box in the post office.
- Driving all the way to the post office without knowing if a mail has arrived or not for her.
- Responding late to official communication sent to her PO Box (in case she misses her regular schedule to visit to visit the post office).
Persona 2

SHELDON
Letter Box User

“I find it a waste of time and energy to open my letter box every day to check for mail.”

About
• 28, single, university professor
• He stays in an apartment which has an individual letter box.
• He checks for mail in his apartment’s letter box daily after work. On the days, he does not receive any mail, he feels that it was a waste of time and energy.
• He usually receives professional communication, communication pertaining to a superhero fan club he is a member of, and the bi-weekly comics he subscribes to.

Responsibilities
• Teach at the university and guide research scholars.
• Receive and respond to professional and hobby related communication in time.

Main Goals
• Being able to carry out his profession effectively.
• Better response time to mails sent to his letter box.

Needs
• Needs a way by which he collects the letters/mail delivered to him in time.
• Prevent loss of time and energy to check the letter box and finding it empty (no mail).
• Prevent incidents of missing to collect mail from the letter box.

Pain Points
• No way to know if a mail has arrived or not arrived in his letterbox.
• Wasting time and effort to check an empty letter box.
• Responding late to communication sent to his letter box (in case he misses his regular schedule of checking his letter box).
As a working professional_____
I need a way to get notification of mail(s) received in my letter box or PO Box____
so that I do not have to check regularly my letter box or PO Box for mail(s) but only when I actually get mail(s)____.
# UX Journey

Describe Actions, Mindset, Feelings and Touchpoints

<table>
<thead>
<tr>
<th>ACTIONS</th>
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<tbody>
<tr>
<td>1. Deciding to check the letter box/PO Box for mail.</td>
<td>2. Reaching the letter box/PO Box</td>
<td>3. Unlocking and opening the letter box/PO box</td>
<td>4.a. Collect received mail(s)</td>
<td>4.b. Stare at empty letter box/PO Box</td>
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<td>5. Close and lock the letter box/PO box</td>
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<td>“I have some free time, let me check if I received any mail.”</td>
<td>“I hope I have received some good news.”</td>
<td>“Thank God! I did not forget the key.”</td>
<td>“Oh! I have got mail.”</td>
<td>“Oh no! There are no mails.”</td>
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<td>“Let me check if I received a mail from Santa.”</td>
<td>“I really hope I have received some good news.”</td>
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<td>- Proximity to the letter box or PO Box.</td>
<td>- Path to the letter box/PO box.</td>
<td>- Key of the letter box/PO Box</td>
<td>- The letter box/PO Box</td>
<td>- The letter box/PO Box</td>
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<td>- Availability of time</td>
<td>- The letter box/PO Box</td>
<td>- Received mail(s)</td>
<td>- Key of the letter box/PO Box.</td>
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<tr>
<td>- Expectancy of mail</td>
<td>- The letter box/PO Box</td>
<td>- Received mail(s)</td>
<td>- Key of the letter box/PO Box.</td>
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Prototype

Prototype screens for an IoT application to solve your PoV

The mockup screens of the prototype prepared in BUILD are:

**Figure: Main Screen of the My Letterbox app**

**Figure: Archives Screen of the My Letterbox app**

The link to the BUILD prototype is:

https://standard.build.me/api/projects/1f15bb6ad92522860cd3a11d/prototype/snapshot/latest/index.html#/14774963897957649_S0