

User Story 1:

- Summary: As a <Owner> I want the <live video> so that <Owner/user can see the person at the door>
- Priority: Highest
- Story Point: 1
- Assignee: Deok-Hwan Kim
- Description: Taking real time video capture from camera. The camera should be mounted on Raspberry Pi to capture real time video.
- Acceptance Test: Try if the object in front of the camera is identical to the image projected onto a screen

User Story 2:

- Summary: As the <Owner> I want to be able to <train my security camera> so I can <add authorized person>
- Priority: Highest
- Story Point: 6
- Assignee: Mohammad Karami
- Description: This task needs a trained machine learning model (convolution neural network) as well as a set of labeled pictures of the person, whom would be defined as authorized.
- Acceptance Test: (i) Try adding image of a person, (ii) Try adding image of a person, and (iii) Try adding image of a person

User Story 3:

- Summary: As the <Owner> I want to be able to <have a summary of task> so that I can see if <all features are working>
- Priority: Highest
- Story Point: 3
- Assignee: Deok-Hwan Kim
- Description: contains all the required information about the administrator
- Acceptance Test: (i) Try running it without a camera, (ii) Try running it without a database

User Story 4:

- Summary: As the <Owner> I want to be able to be able to <see the recognized faces> so I can see <list of authorized persons>

- Priority: Highest
- Story Point: 3
- Assignee: Harish Nagallapati
- Description: This task needs to have machine learning model which is already trained. It also needs a user interface so the user can have interaction with the software and have access to the set of labeled picture of authorized persons.
- Acceptance Test: (i) Try loading an empty array of images, (ii) Try loading a different format of image

User Story 5:

- Summary: As the <Owner> I want to be able to <modify or update the database> by <adding authorized persons>
- Priority: Highest
- Story Point: 3
- Assignee: Malachi Kitsa
- Description: This task needs to have a database as a collection of set of pictures of authorized persons.
- Acceptance Test: (i) Try adding a person with missing attributes, (ii) Try adding a person with wrong attributes, (iii) Try adding a person beyond capacity of the database

User Story 6:

- Summary: As the <Owner> I want to <get informed when a person is at the door> so I know <my home is safe>
- Priority: Highest
- Story Point: 4
- Assignee: Junyoung Kim
- Description: This task needs to have User Interface software so user can check the current and past situation of house. Of course, as well as trained machine learning model as well as real time video capture.
- Acceptance Test: (i) Try with a person at the door, (ii) Try without a person at the door, and (iii) Try with a non-person object at the door.

User Story 7:

- Summary: As the <Owner> I want <E-mail notification> so I can use <my phone> for checking my home safety>
- Priority: Highest

- Story Point: 3
- Assignee: Harish Nagallapati
- Description: This task needs a real time video capture and a trained machine learning algorithm as well as internet connection, so the notification can be sent through Internet.
- Acceptance Test: (i) Try with an invalid email address, (ii) Try with no email address, (iii) Try with different email providers, (iv) Try with no internet connection

User Story 8:

- Summary: As the <Owner> I want to be able to <modify or update the database> by <removing authorized persons>
- Priority: Highest
- Story Point: 3
- Assignee: Malachi Kitsa
- Description: This task needs to have a database as a collection of set of pictures of authorized persons.
- Acceptance Test: Try removing a non-existing person

User Story 9:

- Summary: As a <Owner> I want the <passwords to be hashed> so that <the passwords are secured>
- Priority: Medium
- Story Point: 1
- Assignee: Deok-Hwan Kim
- Description: This task is added for security reasons.
- Acceptance Test: (i) Try hashing beyond the limit of data size, (ii) Try hashing an empty string, (iii) Try a key with special characters in it

User Story 10:

- Summary: As an <owner> I want <instruction document> so user knows <how to interact with software>
- Priority: Medium
- Story Point: 2
- Assignee: Junyoung Kim
- Description: This task as the last step needs all the features working so it can explained and documented.