Everybody seems to be so exhausted now. So we’ll try to be concise and neat.

Our project name is Smart Shoebox!

These are our team member minki, gyu-hyeok, jung-hyun.

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These are the contents we will talk about.

Introduction, User needs, Architecture and functions, Use cases and at last our demo.

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Many people experience difficulty managing their own shoes in a decent and pleasant form. Especially for the people living alone, keeping shoes clean and sweet smelling becomes a tough task to manage. When it rains, shoes get wet and dirty. Can you imagine the smell and feel of the shoe? Even worse the smell starts from the entrance to the place where you will go to sleep. This is when the actual management features are required. and This is where we got the idea of Smart Shoebox.

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What kind of problems do we have? We classified the problems into 4 cases. Like I just said dirty shoes, wet shoes, smelly shoes, these all kinds of situations makes us uncomfortable. And the fact that we do not know well about our shoes could be a problem also.

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Then how can we solve these kinds of problem? How are we going to keep our shoes in good shape?

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We have thought of solutions for these problems and for the user needs. With optimized environment for the shoes we can keep our shoes in good shape. Weather forecast and notice to the user / Recommending the proper shoes for the user, might prevent a wet dirty shoes. The bad smell could be taken care by deodorization. And finally with the Shoes analysis and modeling we can understand our shoes and we can manage our shoes properly.

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With the thoughts about the problem and solutions we have made a smart shoes care service. We use Arduino, Ruby on rails, Algorithms for recommendation, and wifi for communication between smart shoebox and our website.

We provide three kinds of function. Optimization, Analysis, and Recommendation is the main three functions we wanted to realize.

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This is the Overall architecture of Smart Shoebox. We use the Ruby on rails as an application framework. And Arduino will be embedded inside the Smart Shoebox.

// To specify the the two technology Arduino will use sensors and through wifi web, Smart Shoebox will communicate.

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The first function is optimization function. We thought of 4 specified features. Temperature control using electric fan, humidity control using lamp, deodorization using deodorant and sterilization using both the fan and lamp as a sterilizer.

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The second function is Analysis function which is mainly realized to understand the shoes. Inside the Database we have two tables for modeling both user and shoes. Shoes have12 attributes. shoename~…

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We have set a basic information for each type of shoes. It will be added and be shown when requested by the user.

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This is the example of it.