



SeedIt Business Requirements Document

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1. Business Problem Statement

SeedIt gives hobbyists and enthusiasts of all kinds a place to collaborate and build great ideas in small increments. The world needs your two cents to make a million dollar idea. "If you don't put your two cents in, how can you get change?"

2. Current Business Process

All feature ideas start out in the *specification stage* (ideas are vetted, specifications are clearly defined, affected teams are identified, and inter-team-code-interactions are defined--"API"). After *specification* is satisfied, the feature is *designed* by each affected team (i.e. front-end team designs front-end aspects of feature while back-end designs back-end implementation). The feature then moves into *implementation* where the design is implemented in actual code. When all design and specifications have been implemented, the feature code will be peer *reviewed* by at least one other project member--ideally, person(s) from any of the other affected teams that will interact with the coded feature. If the review reveals ambiguities or missing components, the feature will be reverted to the stage where the ambiguity is deemed to have arisen. Upon satisfactory review, the coded feature will be subjected to the defined *testing* measures and any additional measures necessary to assure user satisfaction.

When all prior steps are satisfied, the feature is considered *complete*.

Technology: Trello Board

Process: Feature Development Stages

0. Specification
 1. Design
 2. Implementation (Code it up)
 3. Review Code w/ someone that needs to integrate with it
 4. Testing (Probably Refer to Quality Checklist)
 5. Complete
- *Stages 1-5 will likely have multiple versions (ux, frontend, backend, etc.)
- **If at any stage deficiencies in a prior stage are discovered, the feature will revert to the stage where the deficiency arose.

Traceability: Each feature will be given some unique ID (name or code) at specification and will be tagged in each development stage--this will help us know where multiple (frontend and backend) portions of a feature are at in terms of our development process and reveal ambiguities that need to be fixed.

3. Scope and Limitations

1. Our main focus is providing an idea repository.
2. We do not deal with questions or problems nor will we focus on connecting developers.
3. SeedIt will facilitate all types of hobby's or interests as long as it is not vulgar or of prurient interest.
4. We are not in the intellectual property business and do not intend on protecting nor producing these products. Instead we prefer to ignite a frenzy of developers who are interested in providing the best product to meet the needs expressed by our solution hungry users.
5. We provide software and do not intend to build any sort of hardware to be marketed.

4. Features / MVP

SeedIt will incorporate the following features in the full product.

User Interface:

- 1.1FE. User receives notifications of followed users' activity.
- 1.2FE. Users can see who is following them.
- 2.1FE. User receives notifications on followed tags.
- 2.2FE. User can add/remove tags he/she wants to follow.
- 3.1FE. User can click a button when viewing a seed to follow it.
- 3.2FE. Users receive notifications about seed/branch they are currently following.
- 4.1FE. Button to allow user to follow a seed/branch.
- 5.1FE. Individual Idea Page.
- 6.1FE. Share button on seed/branch/idea page to post to your Facebook Timeline.
- 6.2FE. Widget indication how many Facebook friends like the branch.
- 7.1FE. Interactive graph view built on d3.js
- 8.1FE. Allow user to insert a comment on a seed.
- 8.2FE. Photo Captcha to prevent botting.
- 9.1FE. Button in comment to "turn comment into branch"
- 10.1FE. Widget on side of screen populated with list of similar ideas.
- 11.1FE. List on front-page indicating the trending ideas.
- 12.1FE. Search based on tags.
- 12.2FE. Search based on users.
- 13.1FE. Log in with Google.
- 13.2FE. Log in with Facebook.
- 14.1FE. Web form with input fields for a new idea.
- 15.1FE. Allow users to put tags on their ideas.
- 15.2FE. Allow users to suggest other users put tags on their ideas.
- 15.3FE. Show visible tag cloud on front page.
- 16.1FE. Notify with "toast" messages when an idea has been commented on.
- 16.2FE. Notification messages "inbox."

- 17.1FE. Show popular ideas users would like.
- 17.2FE. Show recent activity in followed ideas.
- 17.3FE. Show recent activity by followed users.
- 17.4FE. Show tag cloud
- 18.1FE. User Profile Page
- 18.2FE. Allow user to edit profile.

Database:

- 1.1.BE. Send XML/JSON/Whatever with followed user activity when required.
- 1.2.BE. Send data concerning who is following a user.
- 2.1.BE. Send data concerning activity on user's followed tags.
- 2.2.BE. Change followed tags for user when requested.
- 3.1.BE. Add a seed to a user's followed seeds when requested.
- 3.2.BE. Send notifications for user's followed seeds when requested.
- 4.1.BE. Add a branch to a user's followed branches.
- 5.1.BE. Send data concerning an individual idea page when requested.
- 6.1.BE. Use Facebook API to share individual idea.
- 7.1.BE. Send data about a tree and its nodes.
- 8.1.BE. Put comment under a seed in database.
- 10.1.BE. Send XML/JSON/Whatever with list of similar ideas.
- 11.1.BE. Send XML/JSON/Whatever or trending ideas.
- 12.1.BE. Return list of ideas that match a given tag.
- 13.1.BE. Google OAuth
- 13.2.BE. Facebook OAuth.
- 14.1.BE. Accept idea web form and input data into the database.
- 15.1.BE. Accept user requests to put tags for given ideas.
- 15.2.BE. Accept user tag suggestions for an ideas and attach them to the idea.
- 15.3.BE. Send list of N most popular tags and their numbers of occurrences.
- 16.1.BE. When pinged, send message indicating the activity that happened.
- 16.2.BE. Generate and send list of notifications for user based on followed branches.
- 17.1.BE. Generate and send data about popular ideas users would like.
- 17.2.BE. Generate and send data about recent activities on ideas user is following.
- 17.3.BE. Generate and send data about recent activity of followed users.
- 17.4.BE. Generate and send user's followed tags along with their frequency.
- 18.1.BE. Generate and send data about a user's profile.
- 18.2.BE. Accept user's request to change profile and edit profile data.

Our MVP will contain core features that allow the product to be deployed, no more. Also, it represents a product with the highest return on investment versus risk.

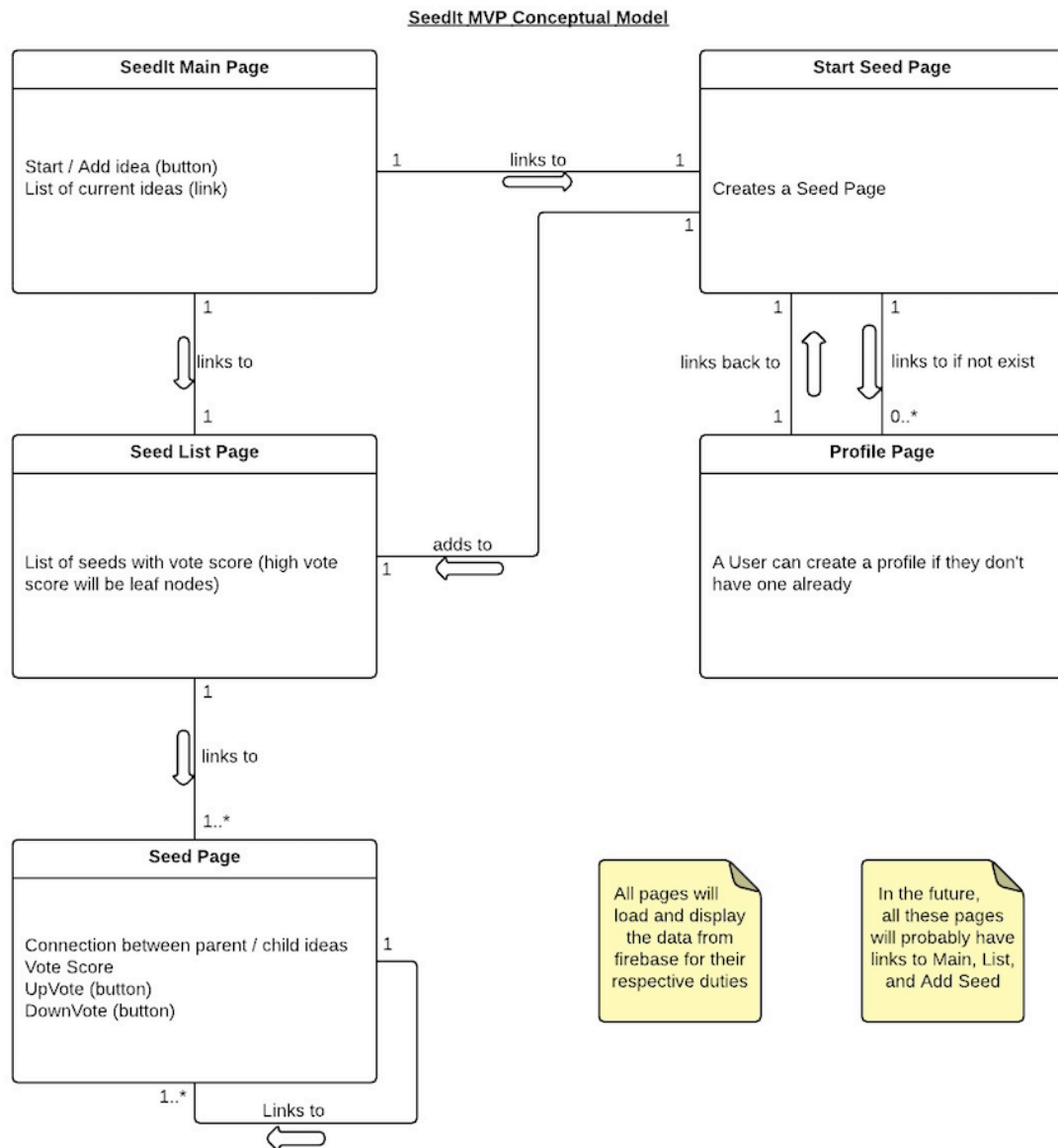
User Interface:

- 1. Main page provides a way to create a seed and a link to a list of seeds.
- 2. Seed list page has a list of seeds with vote scores

3. Start seed page creates a new seed and adds it to the database.
4. Seed page has the seed title, the parent / child relationship, and links to other seeds.
5. Profile page enable users to create user profiles.

Database:

1. The database will provide data to plug in to each page, enabling that page to perform its respective duty.
2. Seed list page will query the database for all seeds.
3. Start seed page will insert a new seed in to the database.
4. Seed page will query the database for data belonging to that respective seed.



5. Assumptions / User Story

A Magic: The Gathering enthusiast wants to create the ultimate deck. He uses Seedit to get ideas from his fellow Magic enthusiasts. He logs into the site, clicks on “create seed” and inputs inside of the seed each card that is going to be in his magic deck. In his user settings, he turned on e-mail notifications so he would know immediately if someone has seeded his idea. He receives an e-mail 30 minutes later informing him that someone has seeded his idea. He then views the seeded idea, containing a deck with some minor modifications. He loves it so much that he decides to use this seeded deck for the upcoming Magic: The Gathering competition.

A stay-at-home mom has a great lasagna recipe, but wants some input on how to make it even better. She logs into SeedIt, creates a new seed, and inputs her recipe. She then waits for someone to seed her idea with suggestions. An hour later, she gets an e-mail notification noting that someone has seeded her idea. She looks at the recipe based on her recipe, loves the changes, and now uses that seeded recipe to feed her family instead of her old one.

A nervous church member wants input on how to write her talk for Sacrament meeting. She logs into seedit, creates a new seed, and posts her talk on seedit. Within a few minutes, some helpful church members modify some parts of her talk to make it flow better. She decides to use one of the seeded ideas for her sacrament meeting talk instead.

A dad wants to make a great recipe for the upcoming chili cook-off. He attempts to seed his own chili recipe, but finds in the suggested seeds box that many other individuals created chili recipes. He instead navigates to those seeds with chili recipes, but finds that the seedit trees are rather large. He decides to look at only the most popular seeds. He finds an idea for a recipe that got up voted a thousand times, then decides to use that for the upcoming chili cook-off.

Bill Gates wants to create a new design for his new Microsoft domain - people.microsoft.com. His UX designers want to test the popularity of their design choices by putting the ideas on Seedit and see how many up-votes they get. Instead of just showing the design choices, however, they also invite people to modify the design. They put numerous ideas on SeedIt, tag them with the phrase “people.microsoft.com design”, and invite people to look for designs with that tag and vote for which ones they like, or modify them as well. The seed (or child seed) with the most up-votes will become the new design for people.microsoft.com.

An unscrupulous content manager at BuzzFeed.com wants to steal more material for his site’s depressingly successful click-bait. He goes to Seedit.com and finds the top trending seeds on the site. He then steals the content of the seeds, posts them on his website, and names the article “10 ideas so incredible, you’d wonder why no one thought of them.” BuzzFeed continues making money, and the earth is plagued with suffering as punishment.

A hamburger connoisseur wants to see the top hamburger recipes on SeedIt. He finds the most popular hamburger recipe on the site, but believes that he can improve it a bit. He Seeds the most popular hamburger idea and puts in a few of his own ingredients. After a few weeks, his seeded hamburger recipe becomes more popular than the original and his Seedit reputation goes up.

6. Quality Checklist

1. Unit Tests

For testing our Angular/JavaScript front end and our Node.js/Firebase back end we will be using Karma and Jasmine. Karma is a JavaScript command line tool that can be used to create a web server which loads your source code and can run your unit tests against any browser. We will use Jasmine to write and organize the actual unit tests to assert that our features are working as expected.

2. Automation Tests

We will use Selenium to create automated tests which will do exploratory testing of our web application. Selenium will allow us to “record-and-playback” interactions within a browser to test that our application is performing as desired. As we develop our app we can frequently run these automated tests to ensure our new features are compatible with our old.

3. Prototyping

We will create several prototypes early in the design phase of our application which can be used in usability testing. This will help us determine the design we want to use that is intuitive, simple, and user-friendly. We will use Construct to make quick and easy prototypes of our application which we can iteratively edit and test to ensure we build a great product.