



**3E**  
Enrich. Enhance. Empower.

# 3E SOFTWARE SOLUTIONS

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[www.3esofttech.com](http://www.3esofttech.com)



[www.thecookbot.com](http://www.thecookbot.com)

## CASE STUDY – COOKBOT RECIPES



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## 3E Software Solutions

An App to search for recipes to cook with the ingredients you have. 3E's own product

### **Background**

*What Started of as a hobby project during 3E's innovations days, the App is now a full fledged product*

### **What were the Problems / Opportunities?**

- *There was a gap in serving people who wanted to search for recipes based on what ingredients they have instead of choosing a recipe and then procuring ingredients for it.*
- *Most Recipe Apps did not have the option to exclude ingredients users did not want to include or were allergic to.*
- *There were no Apps with unified features of searching for recipes by their by ingredients or by their name, video recipe search and option to save recipes locally for use later.*



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### How did 3E meet its Objectives?



#### **Research & Data Collection**

- *Market analysis and identification of gaps in existing solutions*
- *Identification and analysis of popular recipe websites and their data structures*
- *Development of data scraping algorithms for scraping Recipe websites*
- *Collection of over 500,000 Recipes, their sources, ingredients and cooking instructions*



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### How did 3E meet its Objectives?



#### **Building & Testing a basic prototype**

- *Development of a basic Hybrid Android App*
- *Implementation of basic Recipe search using the recipe name*
- *WebView implementation for displaying Recipes within the App*
- *Database Clean-up, Stop Words removal etc. to improve Database Query Speed*
- *Functional Testing, Usability Testing, Security Testing and other standard testing procedures undertaken on the prototype app*



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### How did 3E meet its Objectives?



#### **Mobile & Backend Development**

- *Implementation of Search by Ingredients and Ingredient Exclusion features*
- *Implementation of Video Recipe Search, Saving Recipes and Social Media Sharing features*
- *Development of Hybrid App with Cordova, JQuery Mobile, HTML5 and CSS3*
- *Development of backend using Java, REST & Json technologies*
- *Materialize Library for Material Design based UI*
- *Implementation of In-App local storage for save recipes and save video recipes*



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### How did 3E meet its Objectives?



### Compliance Checks

- Ensuring the App meets all guidelines for publishing in the Google Play Store
- Ensuring all resources used in the apps are compliant in terms of licensing requirements
- Checks to make sure all images and creative content are copyright compliant



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### How did 3E meet its Objectives?



### **Release in App Stores**

- *Release of Free and Paid App (with additional features like Saving Recipes)*
- *Release of Apps in the Google Play Store*

<https://play.google.com/store/apps/details?id=com.eeesoft.thecookbotrecipes>

<https://play.google.com/store/apps/details?id=com.eeesoft.thecookbotrecipespro>

- *Release of Apps in the Amazon App Store*

<http://www.amazon.com/3E-Software-Solutions-CookBot-Recipes/dp/B00T0FJKGQ>

<http://www.amazon.com/3E-Software-Solutions-CookBot-Recipes/dp/B00TPFVBS6>



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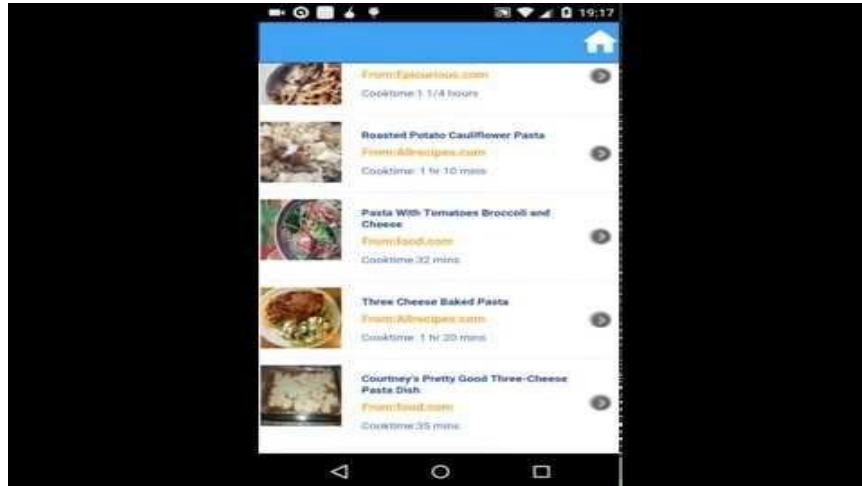
# 3E Software Solutions

### ***And now...***

- *Apps Successfully Submitted to Popular App Stores*
- *More than a 1000 installs over multiple App Stores*
- *More than 20,000 recipes served*

### ***Watch CookBot in Action***

<https://www.youtube.com/watch?v=zuA3mSLFWPM>







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### ***What were the Challenges?***

- *Recipe websites mostly do not structure their data according a present standard unlike, say, ecommerce websites, which made data collection by development of data scraping algorithms very complex.*
- *Database Clean up and optimization to handle the large amount of data (more than 500,000 recipes) and improve query speeds*
- *The Play Store compliance checks by Google are completely automated and are prone to errors, in addition to being vague in certain critical areas concerning CookBot, to prevent abuse of the checking mechanism. As such extensive research, particularly into past precedents, had to be undertaken.*

# THANKS!

## **Any questions?**

Connect with us at

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- ▶ [www.3esofttech.com](http://www.3esofttech.com)
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