

Tukan Flow



Documentation writing pipeline for
better collaboration of fusion teams.

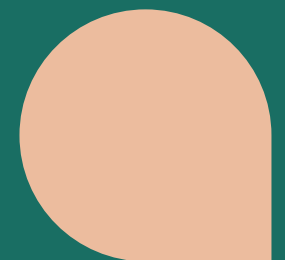
“The hardest single part of building a software system is **deciding precisely what to build. No other part of the conceptual work is as difficult as **establishing the detailed technical requirements**...No other part of the work so cripples the resulting system if done wrong.”**

F.P. Brooks, “No Silver Bullet: Essence and Accidents of Software Engineering”



Problem

From our internship experiences, we noticed a strong domino effect between the problems that cause and are caused by low-quality documentation.



Problem 1

Weak feedback loop between citizen and IT developers on specification documents. As a result, when IT developers receive business specifications, they realize that the doc fails to specify certain required info. This results in a **disorganized back-and-forth communication** between teammates.

Problem 2

Reduced productivity. In the short term, would the team be more productive if the process had an established template? In the long term, would it take new employees less time to adjust if they had **easy-to-grasp** and **easy-to-find** documentation?

**Alice
the Developer,**



**Bob
the Manager,**



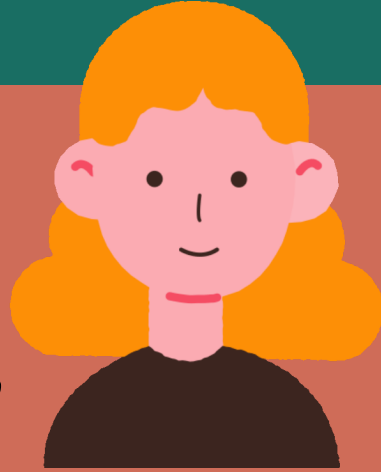
**and Some Awesome
Feature That Never
Happened :(**

**Do you
see the
issue(s)
here?**

Scenario:

1. Bob the Manager comes up with an awesome feature and gets approval for its development.
2. Alice the Developer receives a business specification doc for the new feature from Bob. However, the document does not specify condition details for users with varying types of subscriptions.

**Alice
the Developer,**



**Bob
the Manager,**



**and Some Awesome
Feature That Never
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**Do you
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3. They exchanged several emails and had some meetings to clarify the details, delaying the development process. The details were never written down in the document.
4. Alice did not develop exactly what Bob imagined, so the feature was discarded in the next cycle since it did not show expected improvements. **Bob was discouraged to show initiative.**

What do we want?

Goal 1

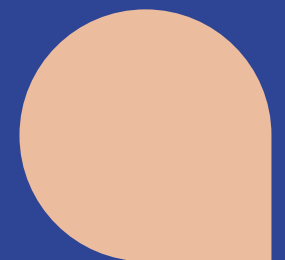
Standardize the documentation writing process, keep docs organized

Goal 2

Effectively engage citizen and IT developers at all stages of the process, improve the feedback loop

Goal 3

Automate mundane tasks to keep the team solely focused on creating a quality product.



Dashboard



Create monthly theme-based events



Develop B2B service



Develop mission words feature



Develop survey screen

Business Requirements

Agenda

- ☐ Summarize the problem statement
Author: Bauyrzhan Tokenov
- ☐ Estimate workload
Author: Bauyrzhan Tokenov
- ☐ Specify the expected result
Author: Assem Dikhayeva
- ☐ Make sure the document specifies the conditions for users with basic subscription
Author: Ayan Mukanov

Summary of the previous document

Firebase Analytics data showed that the free timer expiration of users with no subscription has been consistently dropping since January. To solve this issue, I suggest developing the mission words feature in the player screen...

Paragraph

Industry Analysis

Key Products/Services

The Volkswagen Group is one of the world's leading car manufacturers and Europe's largest automaker. Structurally, the company comprises two primary divisions - the Automotive Division and the Financial Services Division. The Automotive Division overlooks the following industry segments:

- Passenger Cars
The company sells its passenger cars under several brands, including Audi, Bentley, Bugatti, Lamborghini, Porsche, Seat, Skoda, and Volkswagen(VW), the company's flagship brand. The company's portfolio of passenger cars is as rich as it gets, boasting dozens of models ranging from economy and compact to sports and luxury cars. Three models produced by the Volkswagen flagship brand are considered to be in the top-10 best-selling cars of all time: VW Golf, VW Beetle, and VW Passat. Additionally, the Volkswagen Group produces motorcycles under the Ducati marque.
- Commercial Vehicles
This sector covers buses, pickups, and other light commercial vehicles manufactured under Scania, MAN, and Volkswagen Commercial Vehicles. The latter brand is also Volkswagen Group's leader in autonomous driving. The collaborated effort of MAN and Scania is regulated within TRATON GROUP.
- Power Engineering
The company produces **turbomachinery**, diesel engines, two-stroke engines, and other industry-specific machines.

The global trend for environmentally-friendly cars and the company's 2015 emissions scandal spurred the Volkswagen Group to establish its "Together 2025+" strategy aiming to make its portfolio more sustainable. The company runs Europe's biggest electric vehicle (EV) plant and plans to expand the number of this type of plants to eight by 2022. As of 2020, the Volkswagen brand offers e-up!02, e-Golf03, and the I.D. family as full electric models.

The Financial Division offers its customers its services in insurance, banking, leasing, and other financial activities, all tightly connected to the automotive industry.

Key players, market shares, niches, etc.

The Group runs 100 production facilities in 27 countries and has operations in more than 150 countries.

Volkswagen Passenger Cars remains the company's biggest manufacturer in terms of revenue,

Arrange meeting

Approve

Approvals

- ☒ Kunduz Baryktabasov
- ☒ Assem Dikhayeva
- ☐ Bauyrzhan Tokenov
- ☐ Ayan Mukanov

Documentation

Develop streak featur



The Solution



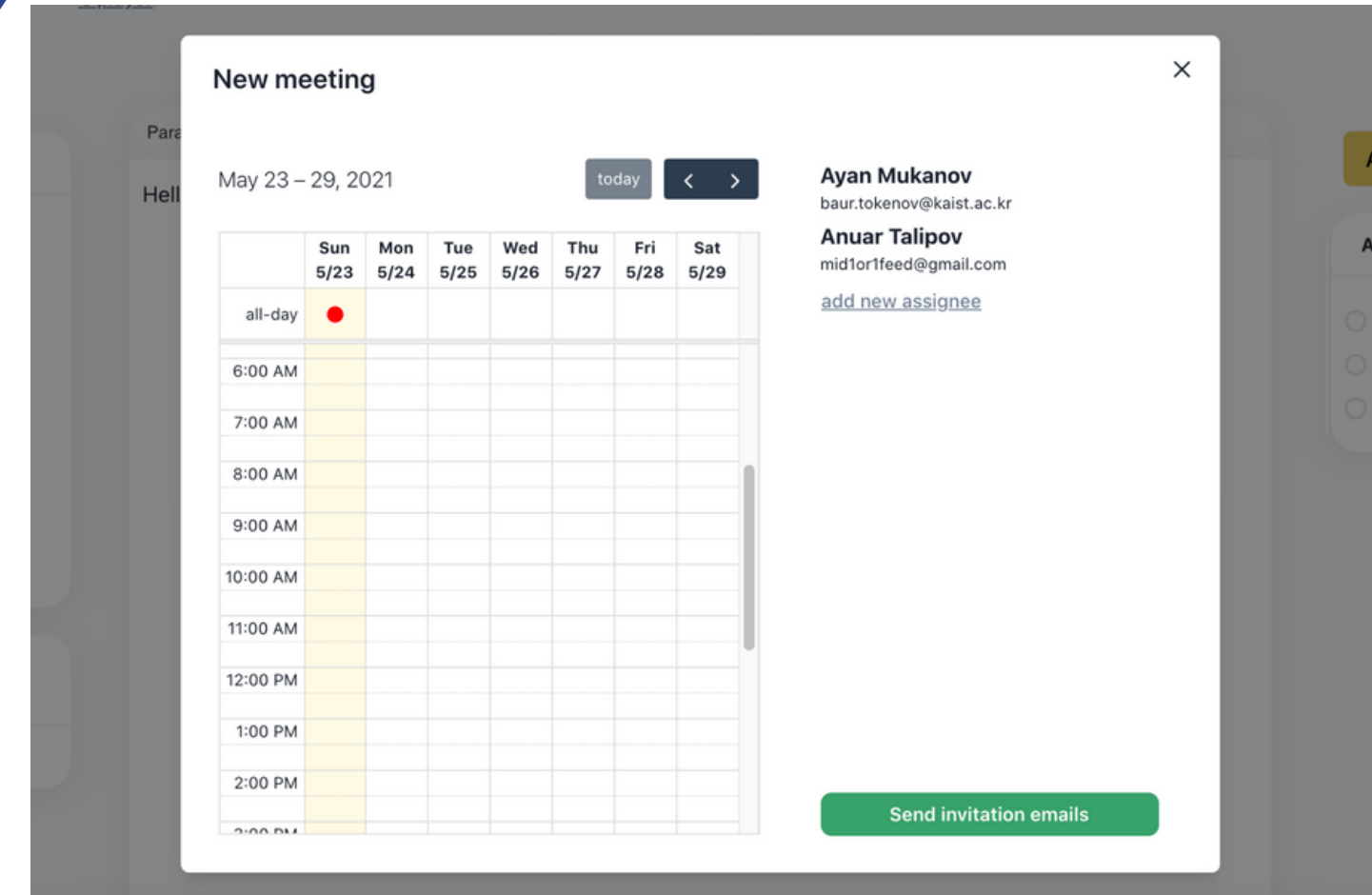
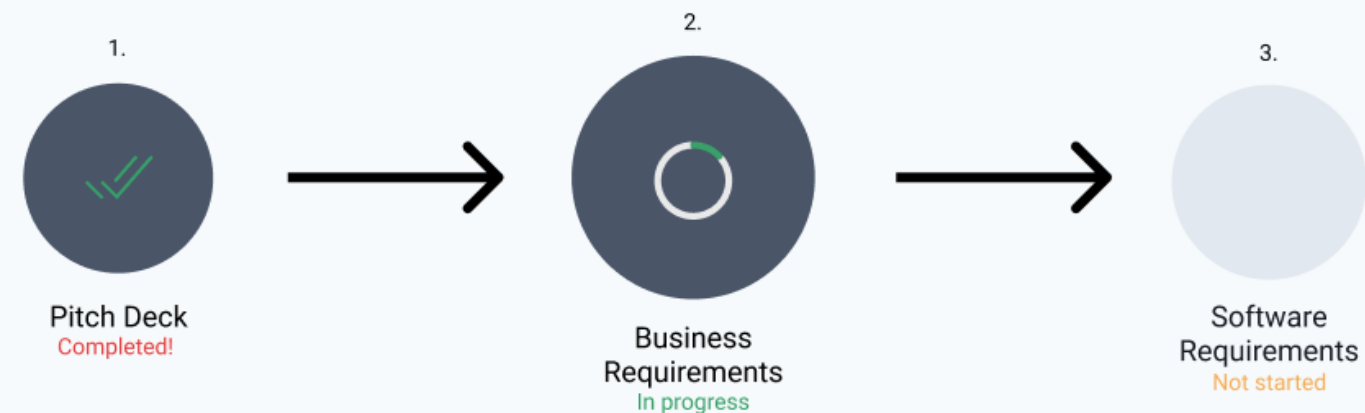
TukanFlow

Because great software comes from a place of effective collaboration

Standardized and Automated Pipeline

Move to the next stage once stage goals are met and all assignees approve, automatically.

Develop streak feature for video

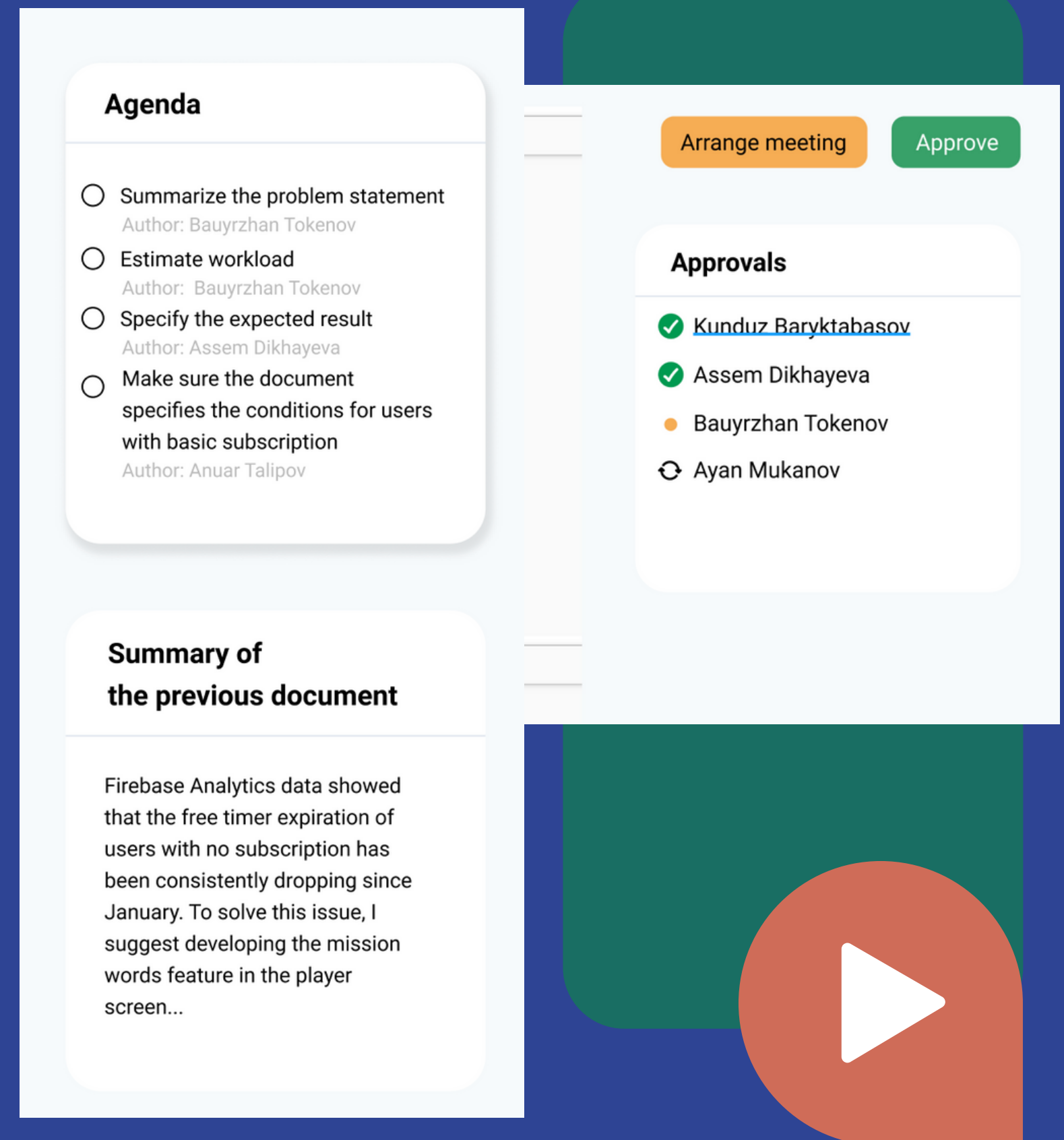


Automate the mundane

The system looks up assignees' schedules to automatically set up meetings for spec discussion.

All documentation stages in one place

- Let citizen and IT developers down the pipeline leave the goals at the initial stages.
- Clarify misunderstandings even before they are created.



Technologies Used

- Microsoft Azure Web Services - hosting and database
- Microsoft Azure Compute - text summarization
- Microsoft Graph API - calendar, email sending system
- Microsoft Outlook
- (not implemented) Microsoft Word - document editor
- Stack: React, GraphQL, MongoDB, Node.js

Take a look at out demo:

<https://tukanflow-frontend.azurewebsites.net/dashboard>