



Case study

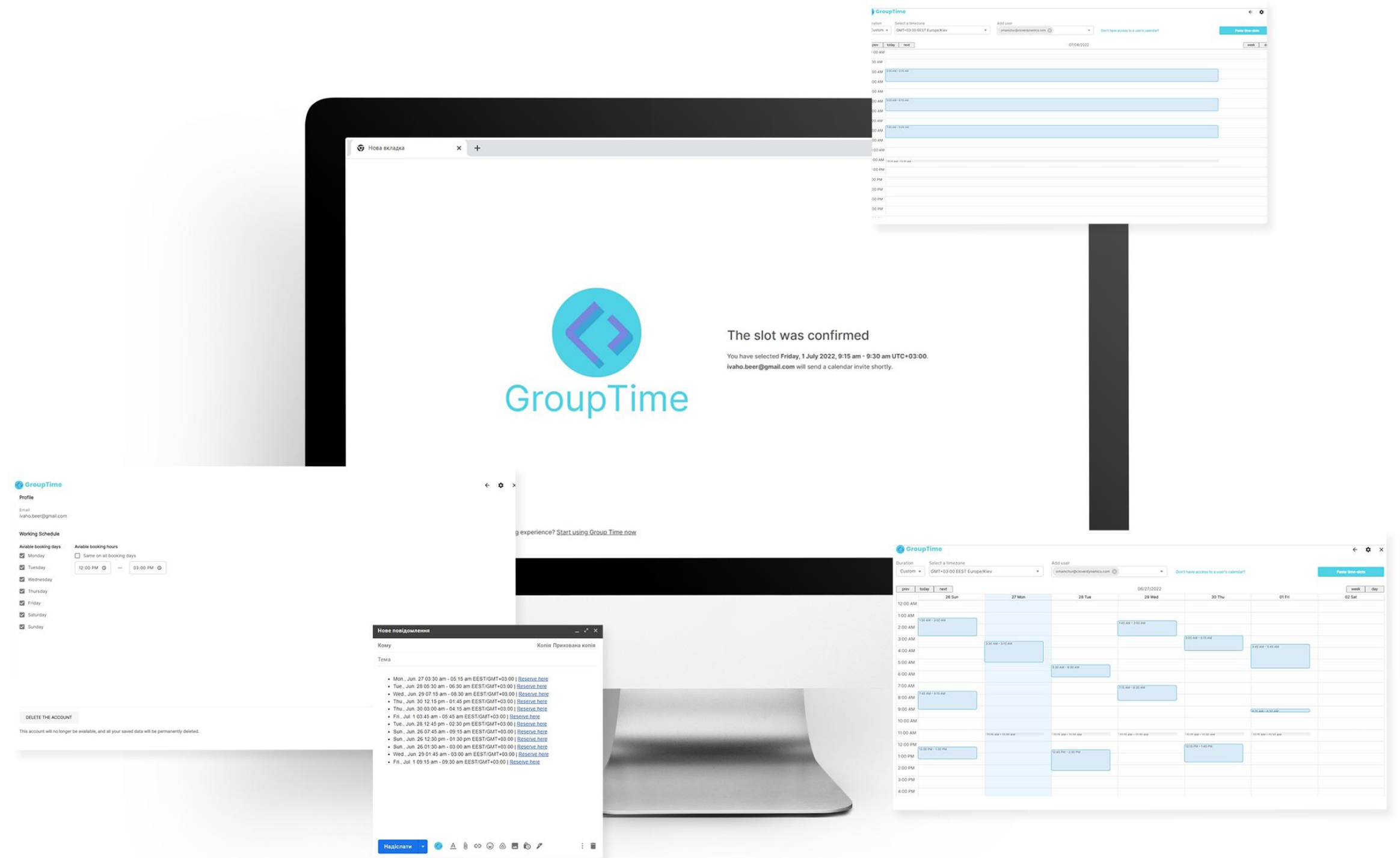
# GROUP TIME



#extension  
#web  
#Chrome  
#Mozilla

Client

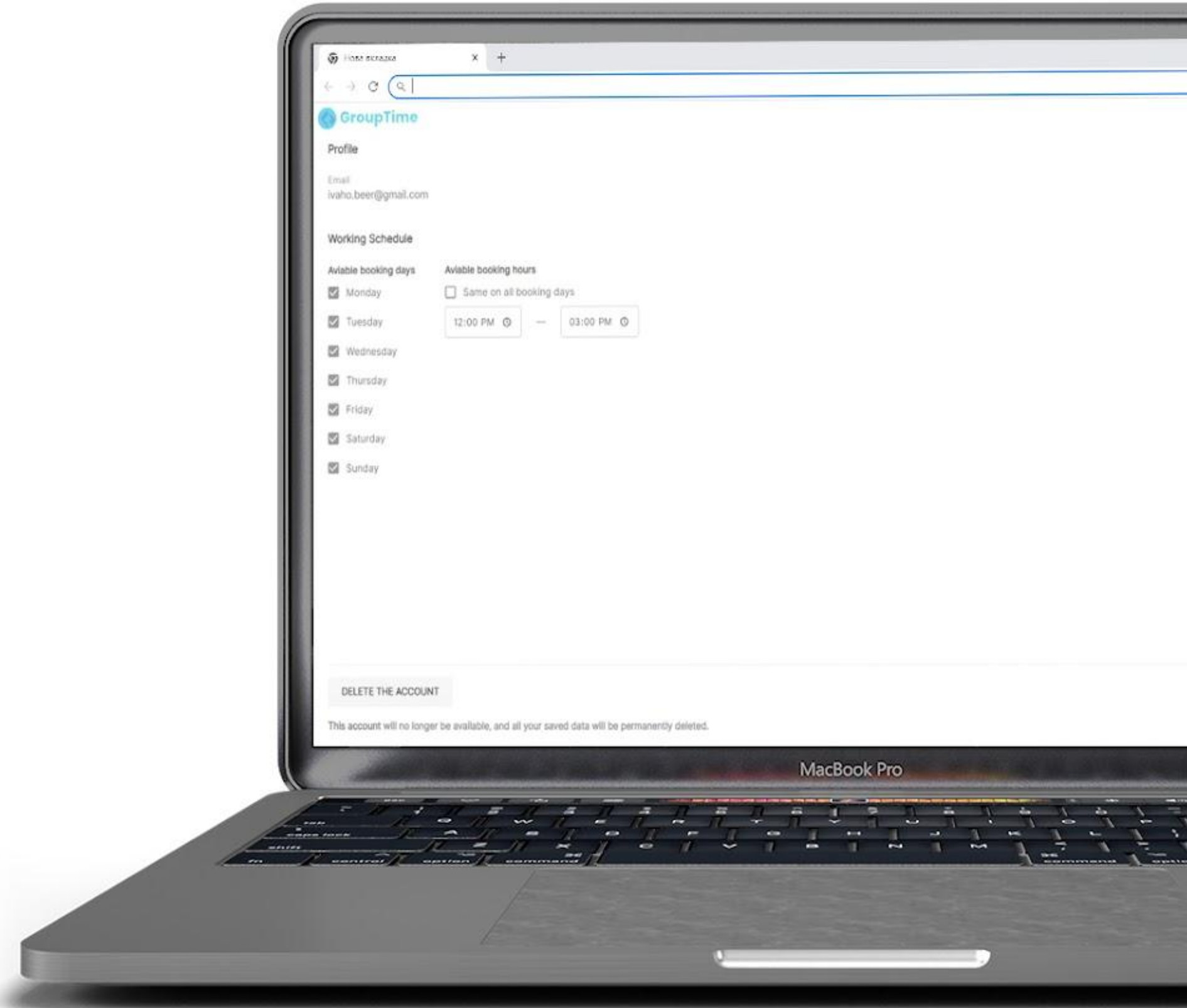
USA entrepreneur



## Challenge

Customer intended to build a browser extension for easy email-flow-based scheduling based on team-to-client suitability requirements. Extension had to unite usability of Google calendar free slots view across corporate visible schedules and versatility of Calendly-like applications' slots variety invitation for non-registered recipients.

The main challenge was to grasp the simultaneous view of all free slots of combined teams schedules, and then provide recipients with all scheduling options possible to reduce friction in back-and-forth communication prior to creating a meeting.



# Core Requirements

1

Interactive calendar view

2

User's corporate/personal calendar integration to log in and view slots of all shared calendars available

3

Email composer integration to invoke extension and input results in email body

4

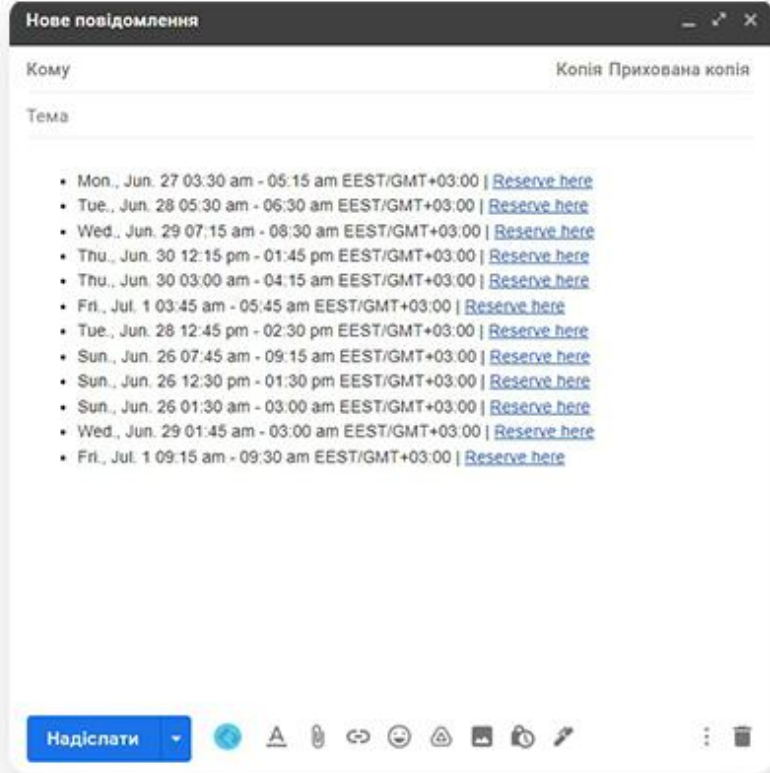
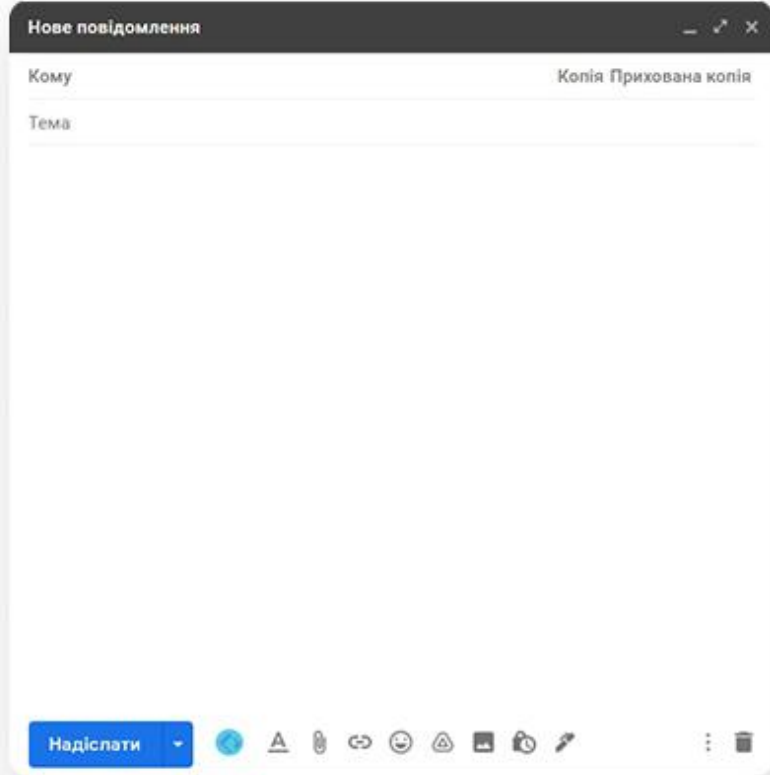
Time slots available for booking via link by any recipient

# Solution

Required extension needed to be a complementary improvement to existing flows and work schemes. The final solution was integration with Google calendar composer and Microsoft Outlook as the most-widely used solutions for storing corporate calendars and sending emails for meeting slots suggestions.

Extension would need to get access to user's initial corporate or personal calendar through log-in, provide dynamic view of existing schedule of user's or any associated person's calendar (by having the shared calendar access) and allow to grasp all the free slots as separate time and date selection confirmation links.

Each recipient user in the end must finally get access to confirming the suitable time, date and email to be invited to the future event yet to be created by the sender and his team.



# Architecture

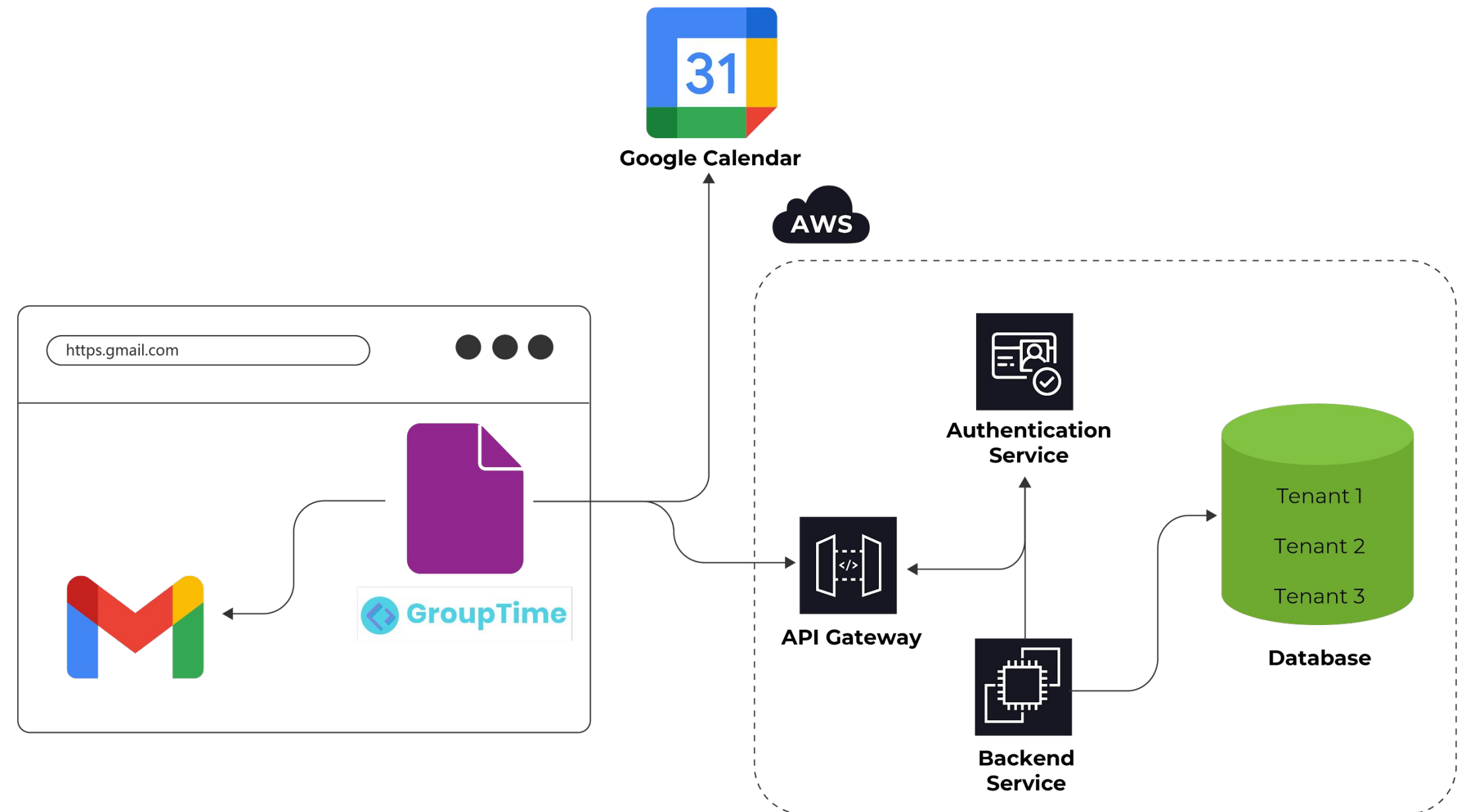
**e Architecture** - Interaction with Google Calendar and Outlook Calendar through **REST API**.

**Local storage** is used for persisting the data during extension usage

**Browser API** is used for communication between the popup and the content script.

**Multi-tenant architecture** ensures that each tenant's data is isolated and remains invisible to other tenants. Cost for the environment is shared between customers and technically belongs to the SaaS model.

**Token authentication** ensures that any action performed by the user (thus any request to the backend) contains the internal token. To process request the token must be validated and in in case of errors the access will be rejected.

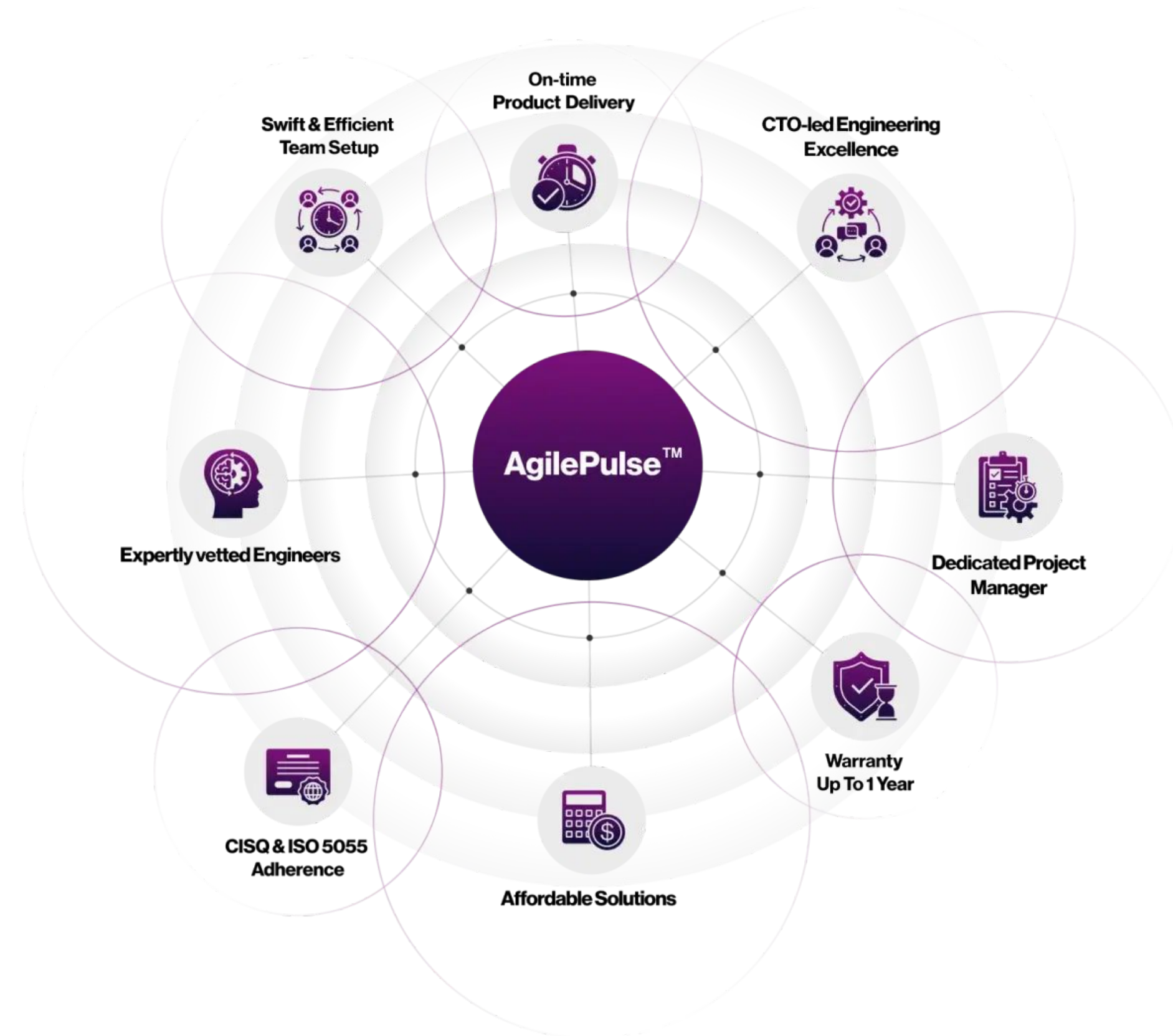


# Benefits of Clover Dynamics

At Clover Dynamics, we believe in building long-term relationships with our clients through exceptional customer experience. We provide a full cycle of product development services & Team Extension, that go beyond coding and into the realm of delivering value. Our team of skilled professionals is dedicated to helping our clients achieve their business goals through innovative technology solutions and unparalleled customer experience.

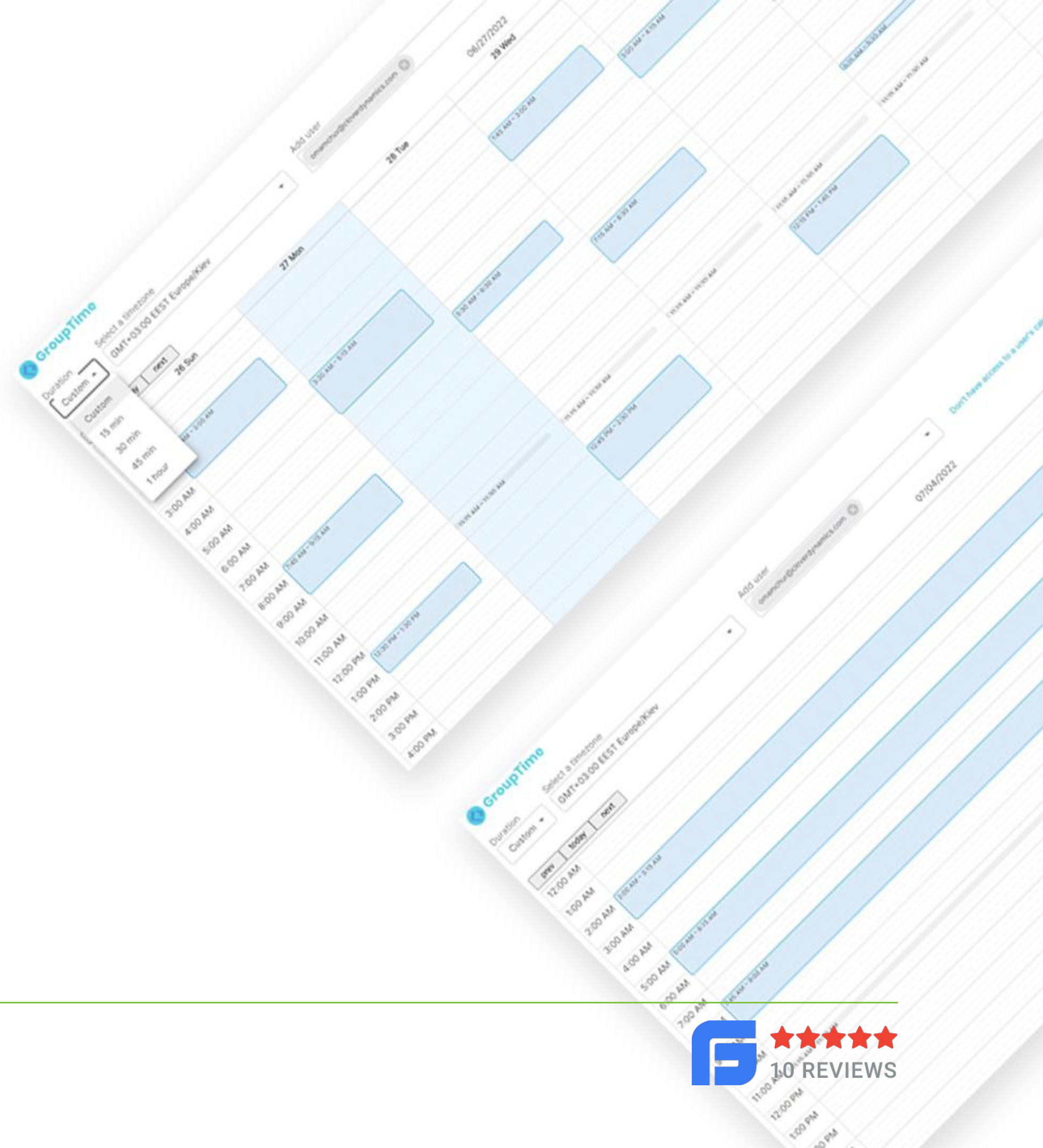
Drive your project to success with CTO-led engineering excellence, ensuring that every aspect of your development is guided by top-tier expertise and precision. Our expertly-vetted engineers are selected through a rigorous process, guaranteeing that your team is composed of subject matter experts dedicated to delivering quality results. Benefit from continuous CTO oversight throughout your project, providing a layer of strategic insight and oversight that sets the standard for excellence.

Let's talk! →



# Features

- User work time settings
- Account management
- Email composer in-built extension icon
- Calendar invoking
- Users' with shared calendars adding to current general calendar view
- Selecting time zones
- Selecting slots duration
- Selecting unlimited slots amount
- Pasting selected slots in the email body as formatted text with hyperlinks



# Process

**Discovery Phase** -researched options and best case solutions for Gmail and Microsoft Outlook API integration. Suggested MVP solution for Gmail integration available for Google chrome and Mozilla Firefox.

**Implementation:** created project skeleton and 2 versions of extension one for each browser requested.

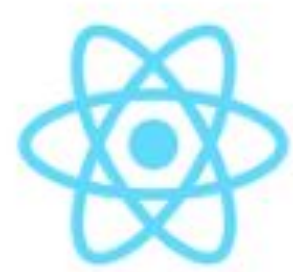
# Deliverables

- Database environment setup
- Chrome Web store extension file
- Mozilla Add-ons extension file
- Team performance reports
- Project documentation (extension store management instructions)





# Technologies



# Services

- Web extension development
- Project management
- Quality assurance

## Country

USA

## Status

MVP version deployed. Available in Chrome Web store and Mozilla Add-ons

## Team

### Engineering

- 1 Frontend Developer - 40hours/week
- 1 Backend Developer -10 hours/week
- DevOps - 10 hours
- QA Engineer - 10 hours/week

### Management

- PM - 10 hours/week

## Duration

~2 months



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We at Clover Dynamics are not just committed to delivering exceptional software solutions, we're also dedicated to fostering lasting partnerships. Looking forward for the opportunity to work together and create something truly remarkable



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