

Your Smart Invoicing Friend

A diagram illustrating the billy ecosystem. On the left, a laptop screen shows the billy software interface with a sidebar menu (Dashboard, Invoice, Project, Client, Expense, Time Tracker) and a main area displaying an invoice. The invoice details include a placeholder for 'your logo', company information (Your Company Name, Address, Email, Phone Number), and project details (Invoice Number: INV #001, Project Name: Super Duper Web Redesign, Date: 2022-07-10, Due Date: 2022-08-10). It also lists items (Web Redesign per page, Illustration graphic, Photo editing) with their respective quantities, prices, and amounts. A large green checkmark icon is overlaid on the invoice area. Below the invoice, payment information is shown: PAYMENT MADE TO: Dewey, Macbook Pro. On the right, a smartphone screen displays a list of projects (Project Name 01, 02, 03) and a list of latest invoices (INV 001, 002, 003) with status indicators (DRAFT, SENT, SCHEDULE). A purple button labeled 'Send now' is positioned above the smartphone. A paper airplane icon is shown flying from the smartphone towards the laptop, symbolizing the integration and flow between the two platforms.

Team Mercury

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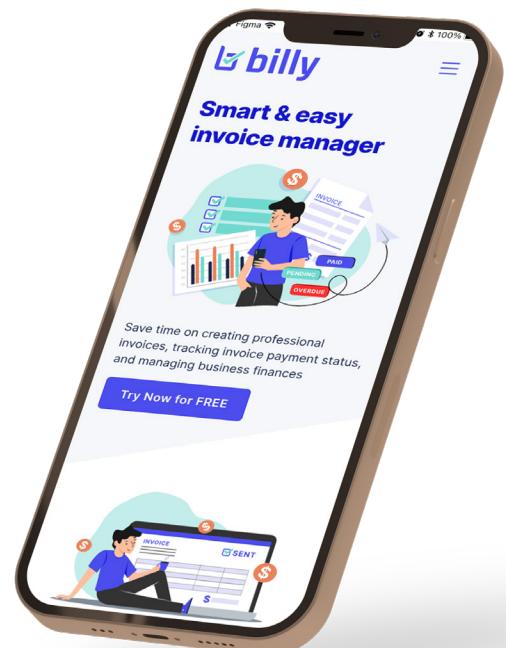
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Project Overview

Project Overview

Problem

As a freelancer and small business owner with a limited invoice managing tool, billing and invoicing are not easy tasks. It can be a very tedious activity that takes time and an additional manual effort.

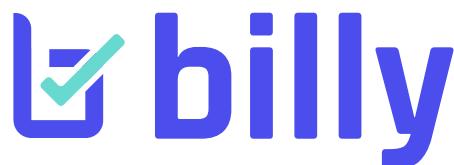
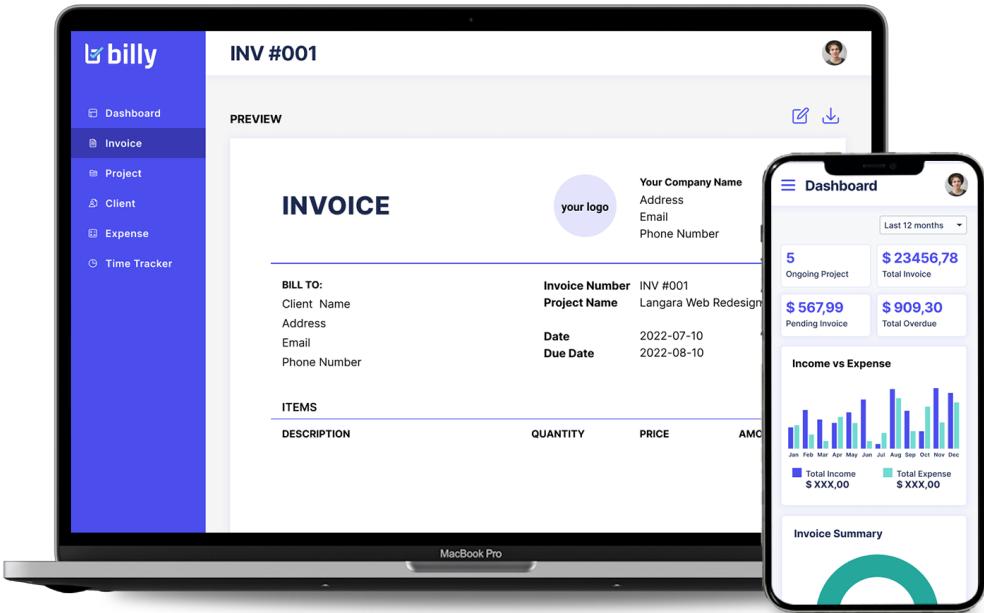
Creating and managing invoices has been a concern for them, dealing with generating process of professional invoice, knowing whether a client received the invoice, and managing the invoice payment.

They must have on hand any information related to their finances and be able to quickly access statistics or reports of their performance and the profitability of their business.

Solution

A web platform where freelancers and small business owner can generate professional invoices in a fast and intuitive way while having control of the finances related to their business by tracking invoices and payments in a project.

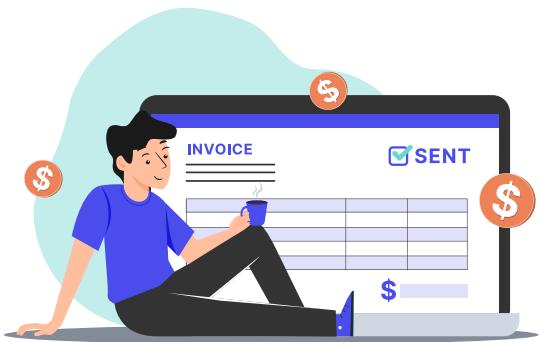




Your Smart Invoicing Friend

BILLY is a web platform which helps freelancers and small business owners to create professional digital invoices and managing business finances by generating invoices and tracking income

Main Features



Generate and schedule invoice quickly

Create a professional invoice in seconds, download it as a pdf and send it to the customers or schedule a recurring invoice.



Track your payment status

Update your projects and invoices page and easily keep an eye on pending and overdue payments.



Manage business income and expense

Manage all projects, clients, and invoices in one place. Get the report of your business income and expense easily.

Competitive Analysis



	billy	invoicequick	Invoice2go	stripe
Customised invoices	✓	✓	✓	✓
Invoice scheduling	✓	✓	✗	✗
Projects management	✓	✗	✓	✗
Incomes and expenses tracking	✓	✓	✓	✗
Time tracker	✓	✗	✗	✗
Business reports	✓	✓	✓	✓
Clients directory	✓	✓	✗	✗

Project Schedule

Design Timeline

Week 1	Team formed / Project Idea / Setting goals and expectation
Week 2	Lean Canvas / User Story / Information Architecture / User Interview & Survey / User Flow
Week 3	Continue with User Flow
Week 4	Wireframe
Week 5	Continue with Wireframe / Logo & Branding / UI Kit Element
Week 6	Usability Testing / Wireframe Revisions
Week 7	Mockups / UI Prototype / Usability Testing
Week 8	Mockups Revisions / Proposal Draft
Week 9	Proposal Revisions / Alpha Testing
Week 10	Finalize Proposal / Social Media Asset
Week 11	Presentation content and slide deck draft / Beta testing
Week 12	Finalize slide deck / Mock presentation
Week 13	Final Presentation

Development Timeline

Week 1	Team formed / Project Idea / Setting goals and expectation
Week 2	Plan system architecture and tech stack
Week 3	Setup front and backend environments and development milestones
Week 4	Setup database and CI configuration
Week 5	Backend setup and git repo screen recording
Week 6	Develop react component tree / Begin development
Week 7	Progress in development for front and backend
Week 8	Implement feedback from usability testing / Adjustment in frontend design
Week 9	Alpha prototype presentation and bug bash
Week 10	Burndown chart and alpha bug bash report
Week 11	Beta prototype presentation and bug bashing
Week 12	Mock Presentation
Week 13	Final Presentation

Technical Overview

Technology Usage

Project Management



We used Trello to manage and keep track of tasklist, Slack for communicating, and Google Drive to manage and share packages and deliverables.

Design



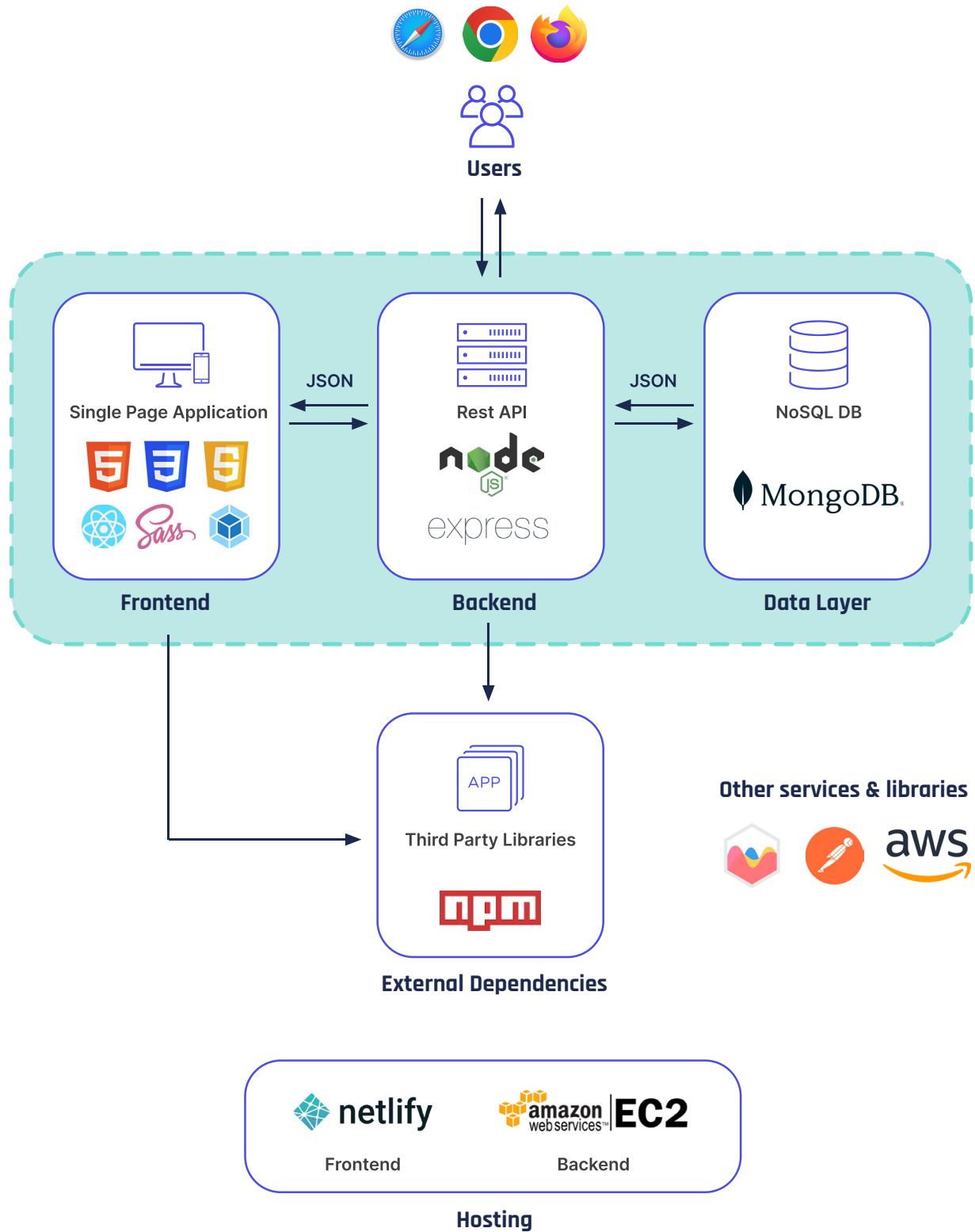
We use Figma to collaborate on UI and UX design tasks (user flow, wireframes, mockups), Adobe Illustrator and Photoshop to create illustrations, icons, marketing material, and Adobe Indesign for creating project proposal.

Development

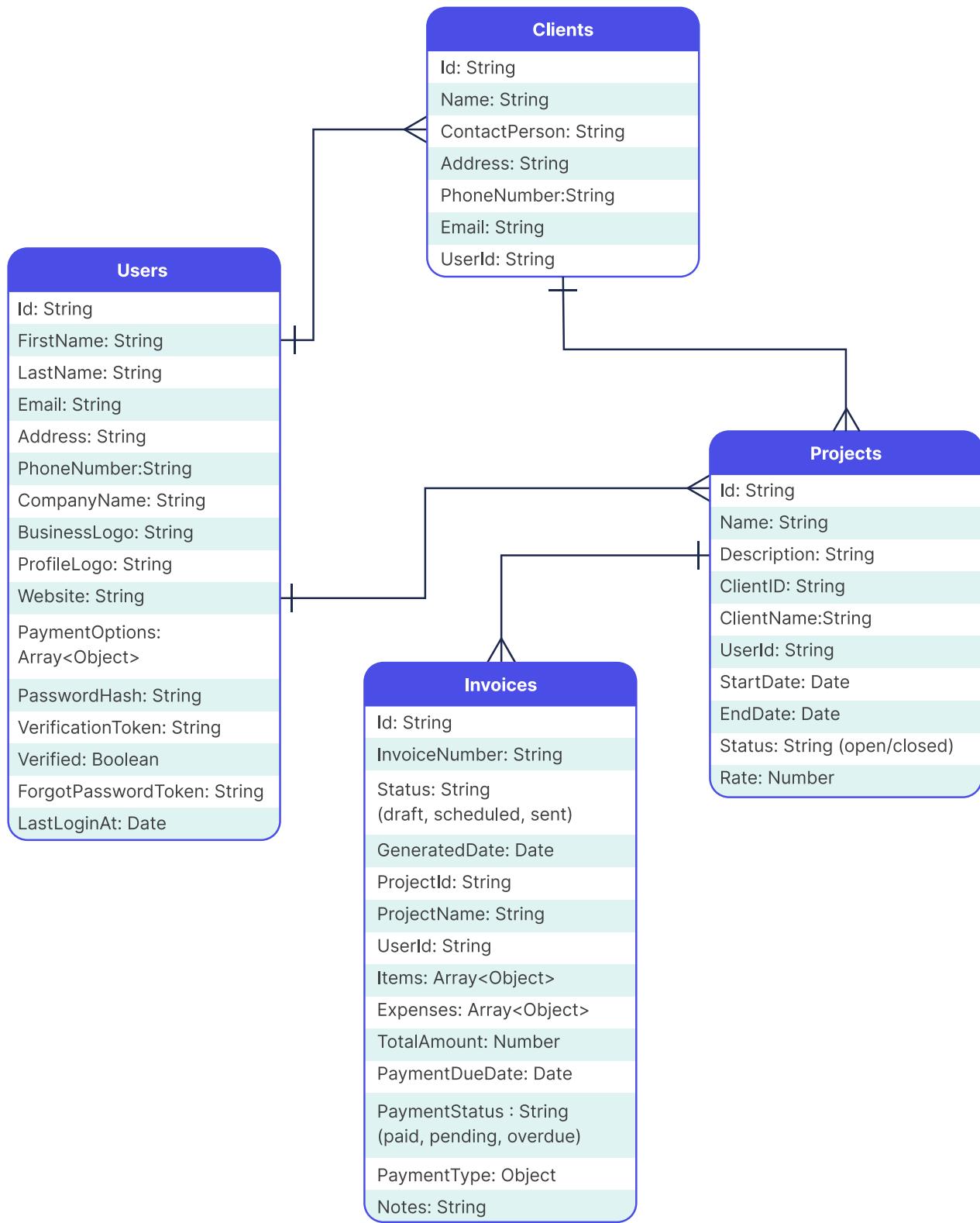


Billy's front-end is implemented using ReactJS. For styling we are using SASS, Redux as the State Container and Chart.js for data visualization. All of them are bundled by Webpack and hosted on Netlify. The back-end uses NodeJS and ExpressJS hosted on AWS EC2. The API was tested and documented using Postman and our persistence of data is provided by our NoSQL database in MongoDB Atlas.

System Architecture Diagram



Data Model



Data-driven Features

How is data acquired and being used on Billy Invoice?

One of the main features of Billy is to gather and display in organized and concise form information about a freelancer's work. By using the application over time the user will generate data on invoice creation, expenses, projects, and income. This information is then displayed back to the user giving them insight into their finances as well as new tools to keep track of pending invoices.



Where and how is the data available for the user?

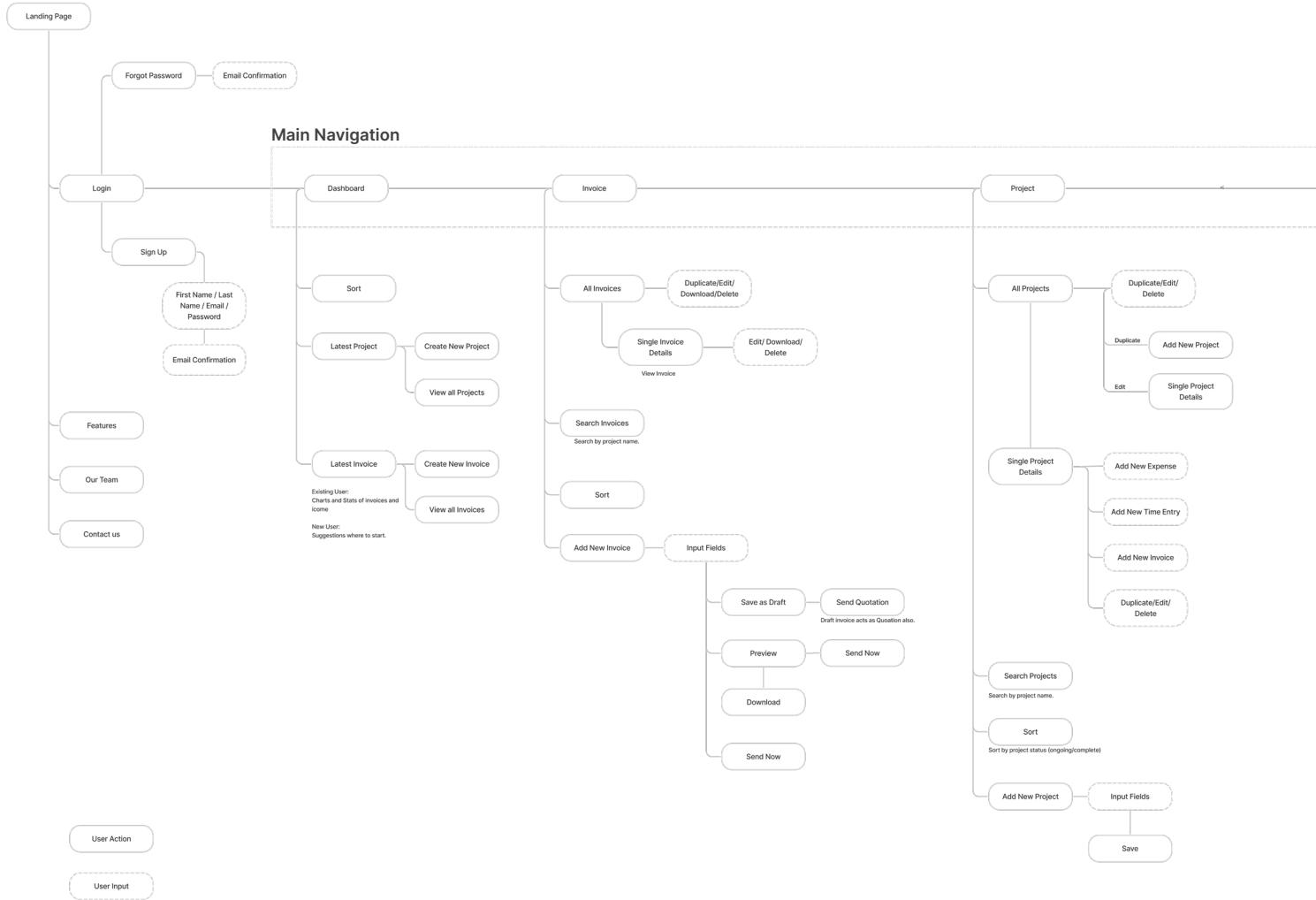
As the users sign in, they are welcomed to the dashboard, a visually appealing summary of the latest entries done by the user. Here the user can have an overview of their business health by checking and comparing expenses vs. income, checking invoices already paid or overdue, latest invoices created, projects ongoing, and various general metrics.

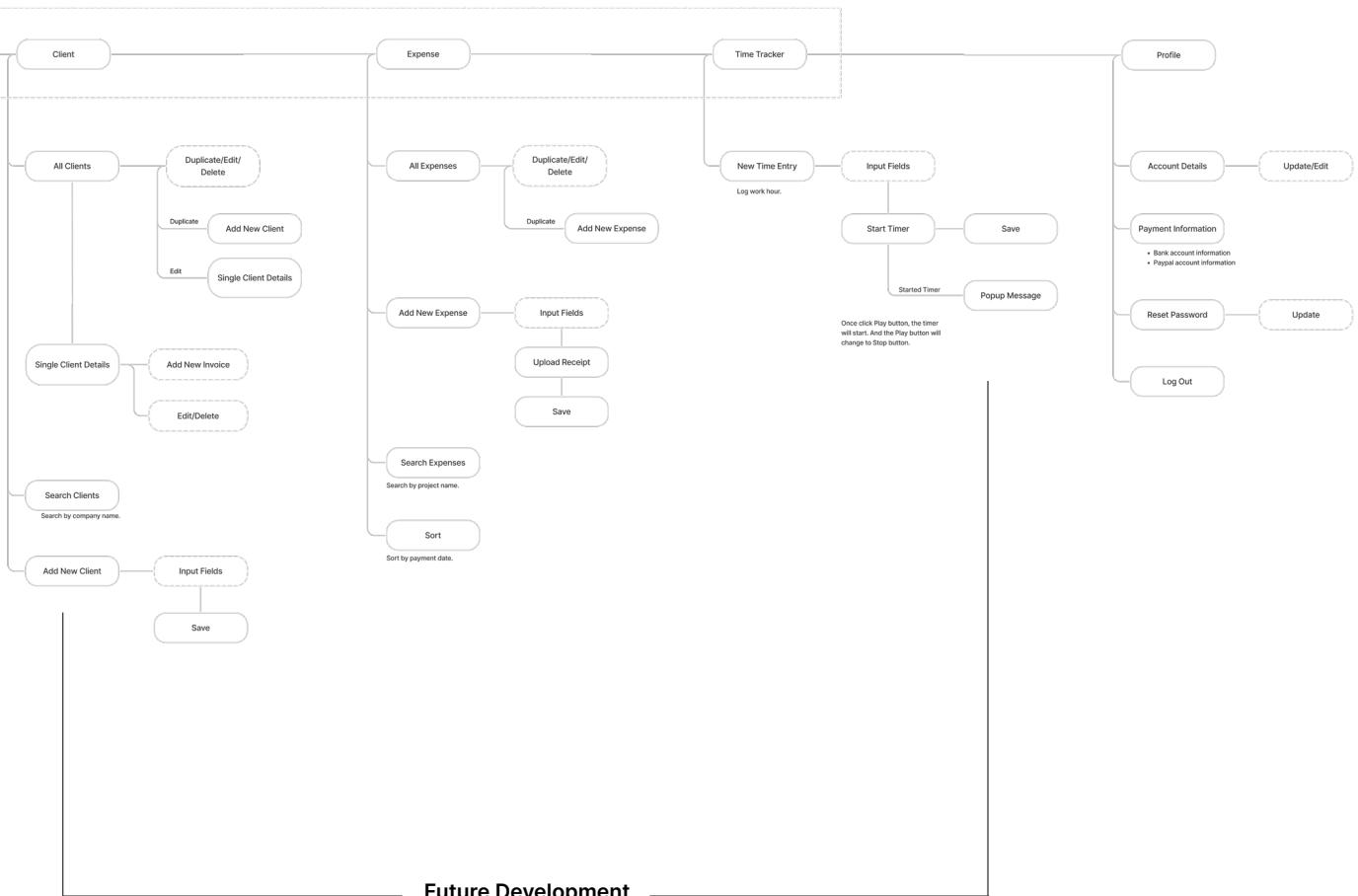
Can the user manipulate and interact with the data presentation?

- Users can filter and manage the dashboard graphs for a more wide or specific overview
- Users can navigate through projects, invoices, or expenses main pages, check and apply various tags and filters and understand how their work hours are being used by each project, which clients pay their invoices on time and if there are pending expenses to be reported to clients
- Users can generate reports and keep their history of invoices safe and organized for future reference

Design Process

User Flow





User Persona



Joe Anderson

Freelance Digital Marketer
25 | Single
New Westminster, BC

Goals

- Focus on the important side of his freelancing career
- To establish his brand as a Digital Marketer
- To have a financial record of his income and expenses
- To travel the world - one country at a time

Frustrations

- Not good at accounting and keeping track of his income and expenses
- Always forgot to track his time at work
- Needed to remind his clients to release the payment for the service

Tech enabled

Early Adopter | Heavy User | Laptop



Victoria Shuster

Small Business Owner
33 | Married with 1 daughter
Kelowna, BC

Goals

- To grow her eco-friendly business
- To contribute in reduction of clothing waste
- To stop printing paper invoices

Frustrations

- Having to do the manual invoicing when dealing with the local suppliers
- Receiving a lot of paper invoices and receipts
- Lack of time to do the bookkeeping of business finances

Tech enabled

Early Adopter | Heavy User | Mobile

Brand Identity

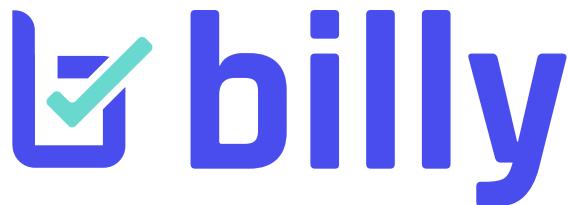
Logo

The icon is the combination of letter 'b' and checked mark. It is to represent Billy helps things get done.

A sans-serif font; Radjani Bold used to show modernity. The rounded corner on the font and the icon to convey that payment and invoice is something that is usually structured but it could be less rigid with Billy's help.

Combinations of cool analogous colors used to represent Billy. Iris as main color and Turquoise as secondary color.

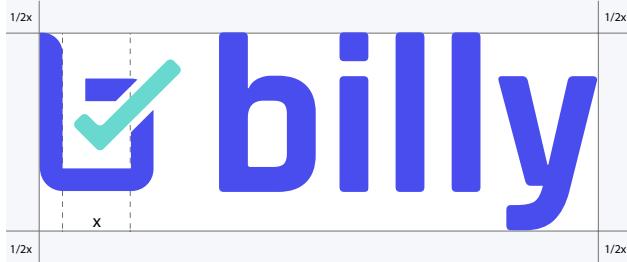
Iris is the extension of blue with a hint of purple, to represent reliability, trust, creativity, and wealth. Turquoise is a friendly and cheerful color. It's radiating the tranquility of blue, the growth of green, and the vitality of yellow.



Full Logo



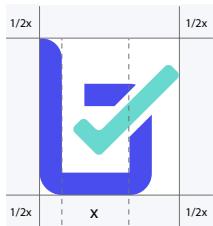
Icon Logo



Clear Space

The logo must always be surrounded by a minimum clear space.

The minimum space surrounding the full logo and icon logo is equal to the half width of the square width in the icon.



Logo Applications



Full colored

Used when the background color is white or light color.



White

Used when primary color is used as background.



Square

Used as favicon

Typography

Aa

ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
1234567890 .,:-+()/&\$@#!?*

Rajdhani

Rajdhani has squared and condensed appearance interpreted as technical or futuristic. The corners are slightly rounded, giving stroke-endings a softer feeling. Rajdhani is used for logo and headings in proposal.

Font Family:

Rajdhani Bold

Aa

ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
1234567890 .,:-+()/&\$@#!?*

Inter

Inter features a tall x-height to aid in readability. It's designed for computer screen. Inter is used as sole typeface in website and for body in proposal.

Font Family:

Inter Regular

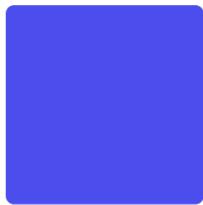
Inter Medium

Inter Bold

Inter Extra Bold

UI Kit

Color Palette



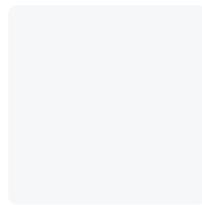
Primary 500
#4B4DED
RGB: 75, 77, 237
Side Nav, button



Secondary 500
#70DBD2
RGB: 112, 219, 210
Success



Tertiary 500
#1C284E
RGB: 28, 40, 78
Footer, font color



Neutral 500
#F5F7F9
RGB: 245, 247, 249
Background color



Accent 500
#F08357
RGB: 240,131,87
Error



Primary 100
#E3E3FC
RGB: 227, 227, 252
Table header, tag



Secondary 100
#C3EEEB
RGB: 195, 238, 235
Tag



Neutral 100
#FCFCFD
RGB: 252, 252, 253
Form background



Accent 100
#FBDCD0
RGB: 251,220,208
Tag



Primary 700
#1417CC
RGB: 20, 23, 204
Button Hover



Neutral 700
#CFD8E2
RGB: 207, 216, 226
Disabled



Primary 900
#222377
RGB: 34, 35, 119
Button active



Secondary 900
#25A79C
RGB: 37, 167, 156
On/Off



Neutral 900
#AFBECF
RGB: 175, 190,207
Outline

Type Scale

Mobile : Inter

H1	32px, Extra Bold Line spacing: -2%
H2	24px, Bold Line spacing: -2%
Subtitle	18px, Bold Line spacing: -2%
Body	16px, Regular Line height: 150%
Body Bold	16px, Bold Line height: 150%
Caption	14px, Medium Line height: 150%
Button	16px, Semi Bold Letter spacing : 3%
<u>Link</u>	16px, Semi Bold underline

Desktop : Inter

H1	40px, Extra Bold Line spacing: -2%
H2	32px, Bold Line spacing: -2%
Subtitle	24px, Bold Line spacing: -2%
Body	18px, Regular Line height: 150%
Body Bold	18px, Bold Line height: 150%
Caption	14px, Medium Line height: 150%
Button	16px, Semi Bold Letter spacing : 3%
<u>Link</u>	18px, Semi Bold underline

Components

BUTTON	Default	Hover	Active
Text only	Primary	Primary	Primary
Text with icon	+ Primary	+ Primary	+ Primary
Text only	Secondary	Secondary	Secondary
Text with icon	+ Secondary	+ Secondary	+ Secondary
Text only	<u>Link</u>	<u>Link</u>	<u>Link</u>
Floating Action Button (Mobile only)			

TAG/ LABEL

DRAFT SENT SCHEDULE

	Default/off	Active/on	
Checkbox	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
FORM	Default	Focus	Invalid
Input	<input type="text" value="Label"/>	<input placeholder="Text" type="text" value="Label name"/>	<input placeholder="Text" style="border-color: red; border-style: solid; border-width: 1px;" type="text" value="Label name"/>
Select	<select style="border: 1px solid #ccc; padding: 5px;">Select Project</select>	<select style="border: 1px solid #007bff; border-radius: 4px; padding: 5px;">Select Project</select>	<select style="border: 1px solid #dc3545; border-radius: 4px; padding: 5px;">Select Project</select>
Text Area	<input style="height: 100px; width: 100%;" type="text" value="Hello"/>	<input style="height: 100px; width: 100%; border: 1px solid #007bff;" type="text" value="Multiline"/>	<input style="height: 100px; width: 100%; border: 1px solid #dc3545;" type="text" value="Multiline"/>
Search Field	Search by project name <input style="width: 20px; height: 15px; vertical-align: middle; margin-left: 10px;" type="text"/>	<input style="border: 1px solid #007bff; border-radius: 4px; width: 150px; height: 30px; margin-right: 10px;" type="text" value="Label"/>	<input style="border: 1px solid #dc3545; border-radius: 4px; width: 150px; height: 30px;" type="text" value="Label"/>

DROP DOWN

Default

Focus

Status

Pending ▾

Pending ▾

- Pending
- Overdue
- Paid

Action

...

...

- Duplicate
- Edit
-
-

TABLE

<input type="checkbox"/> Invoice #	Project Name	Due Date	Amount	Payment Status	Action
<input type="checkbox"/> INV 001	Project 01 DRAFT	YYYY-MM-DD	\$XX.XX	Pending ▾	...
<input type="checkbox"/> INV 002	Project 02 SENT	2022-05-10	\$XX.XX	Overdue ▾	...
<input type="checkbox"/> INV 003	Project 03 SCHEDULE	2022-06-01	\$XX.XX	Paid ▾	...

ICONOGRAPHY

Menu Icons

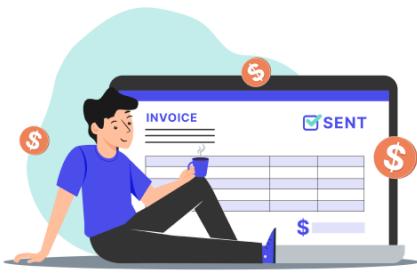


System Icons

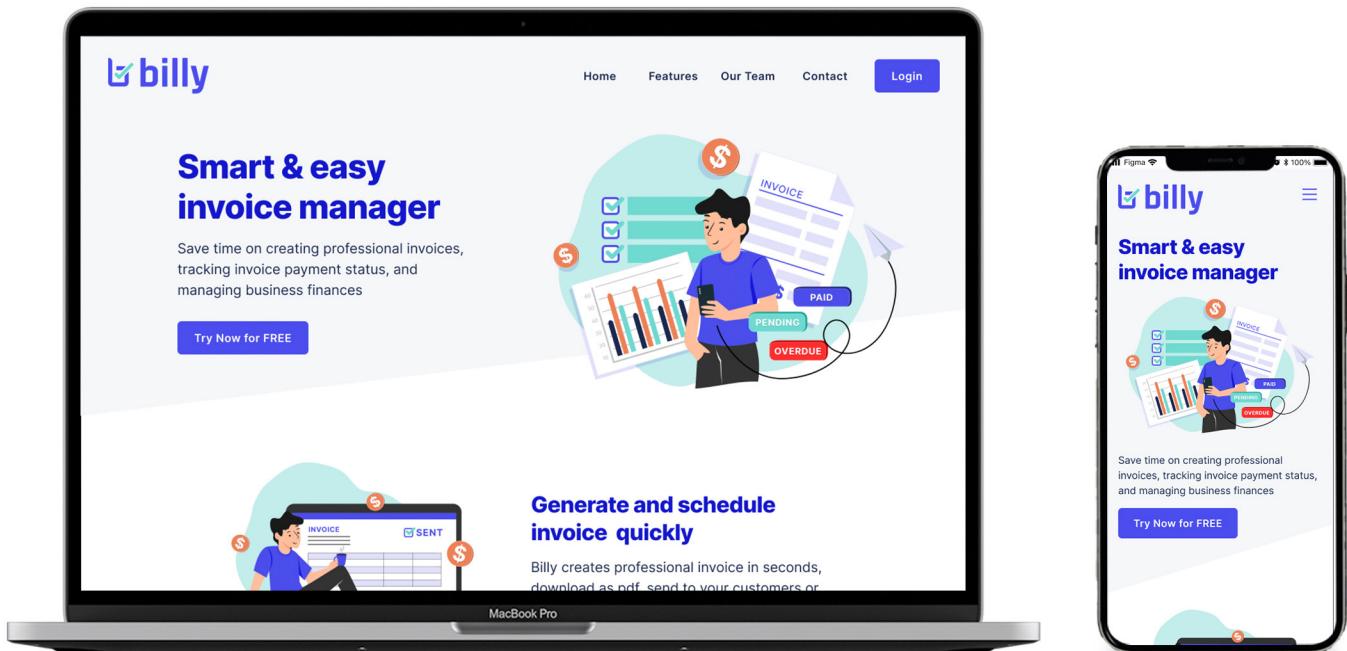
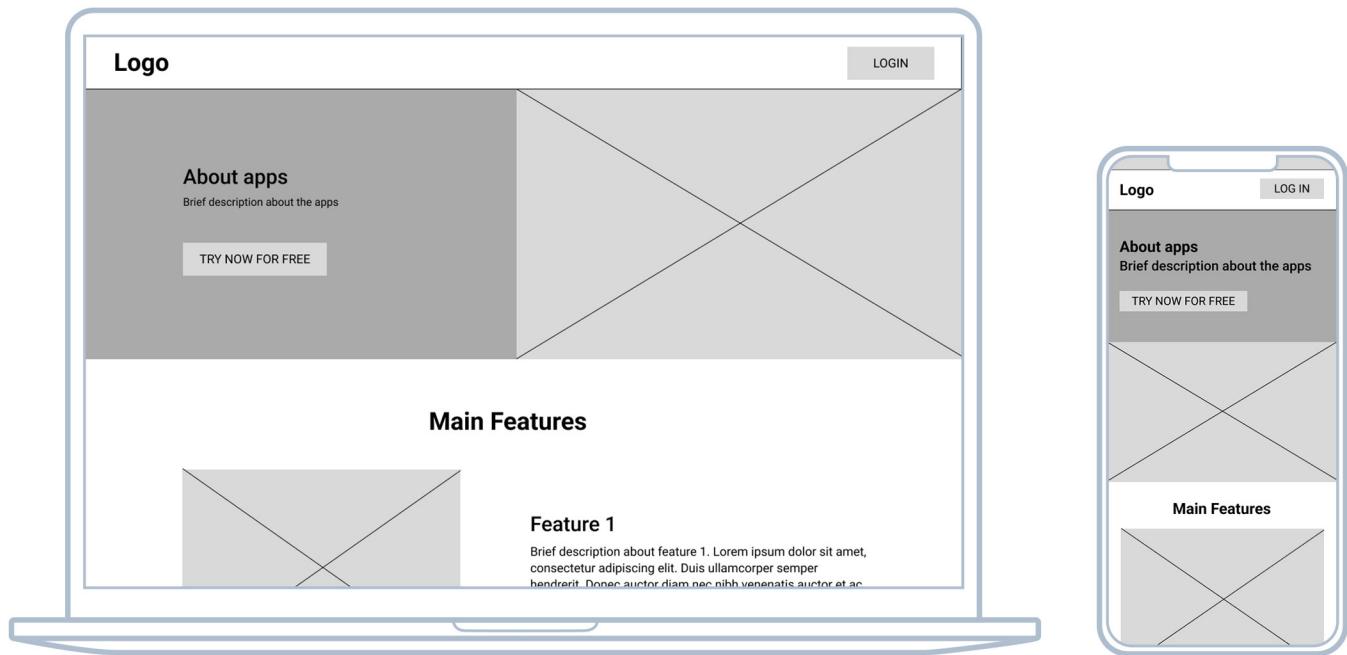


ILLUSTRATIONS

We created illustrations for 'Billy' as a person that will help user with invoicing. We used illustration to convey friendliness and to avoid too serious tone. The illustrations can be found on landing page to describe our features and as success message after sending invoices.



Wireframe & Mockups



The image shows a side-by-side comparison of a dashboard interface on a laptop and a mobile phone. Both devices have a similar layout:

- Left Column (Sidebar):** Contains a "Logo" section with a placeholder icon and a "Dashboard" section with links: Invoice, Project, Client, Expense, and Time Tracker.
- Top Bar:** Shows the title "Dashboard" and a dropdown menu set to "Last 12 months".
- Key Metrics (Top Row):**
 - Ongoing Project: XX
 - Total Invoice: \$XXX,00
 - Pending Invoice: \$XXX,00
 - Total Overdue: \$XXX,00
- Income vs Expense (Bar Chart):** Compares Total Income (light grey bars) and Total Expense (dark grey bars) across the last 12 months.
- Invoice Summary (Donut Chart):** Breaks down total invoiced amount into payments received and total overdue.
- Bottom Navigation:** Buttons for "Projects" (with "VIEW ALL"), "Latest Invoice" (with "View all"), and "VIEW ALL" (with "Pending" and "Overdue" filters).

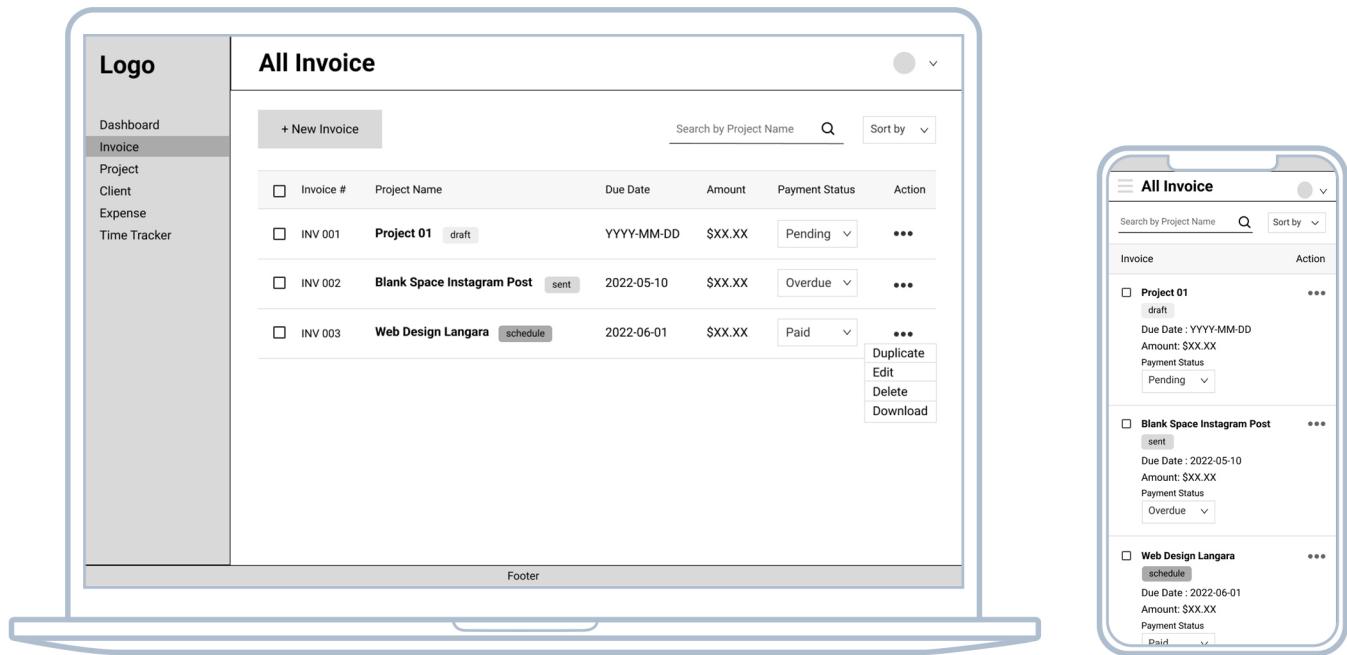
The image shows the final design of the dashboard on a laptop and a mobile phone, branded with the "billy" logo.

Laptop View:

- Left Sidebar:** Shows the "billy" logo, a navigation bar with "Dashboard" selected, and links for Invoice, Project, Client, Expense, and Time Tracker.
- Top Bar:** Shows the title "Dashboard" and a dropdown menu set to "Last 12 months".
- Key Metrics (Top Row):**
 - Ongoing Project: 5
 - Total Invoice: \$23456,78
 - Pending Invoice: \$567,99
 - Total Overdue: \$909,30
- Income vs Expense (Bar Chart):** Compares Total Income (blue bars) and Total Expense (teal bars) across the last 12 months.
- Invoice Summary (Donut Chart):** Breaks down total invoiced amount into payments received and total overdue.
- Bottom Navigation:** Buttons for "Projects" (with "View all" and a list of "Project Name 01" and "Client Name 1" with "END DATE 2022-06-01"), "Latest Invoice" (with "View all" and a list of "INV 001" and "Project Name 1" with "DRAFT"), and "View all" (with "Pending" and "Overdue" filters).

Mobile Phone View:

- Top Bar:** Shows the title "Dashboard" and a dropdown menu set to "Last 12 months".
- Key Metrics (Top Row):**
 - Ongoing Project: 5
 - Total Invoice: \$23456,78
 - Pending Invoice: \$567,99
 - Total Overdue: \$909,30
- Income vs Expense (Bar Chart):** Compares Total Income (blue bars) and Total Expense (teal bars) across the last 12 months.
- Invoice Summary (Donut Chart):** Breaks down total invoiced amount into payments received and total overdue.



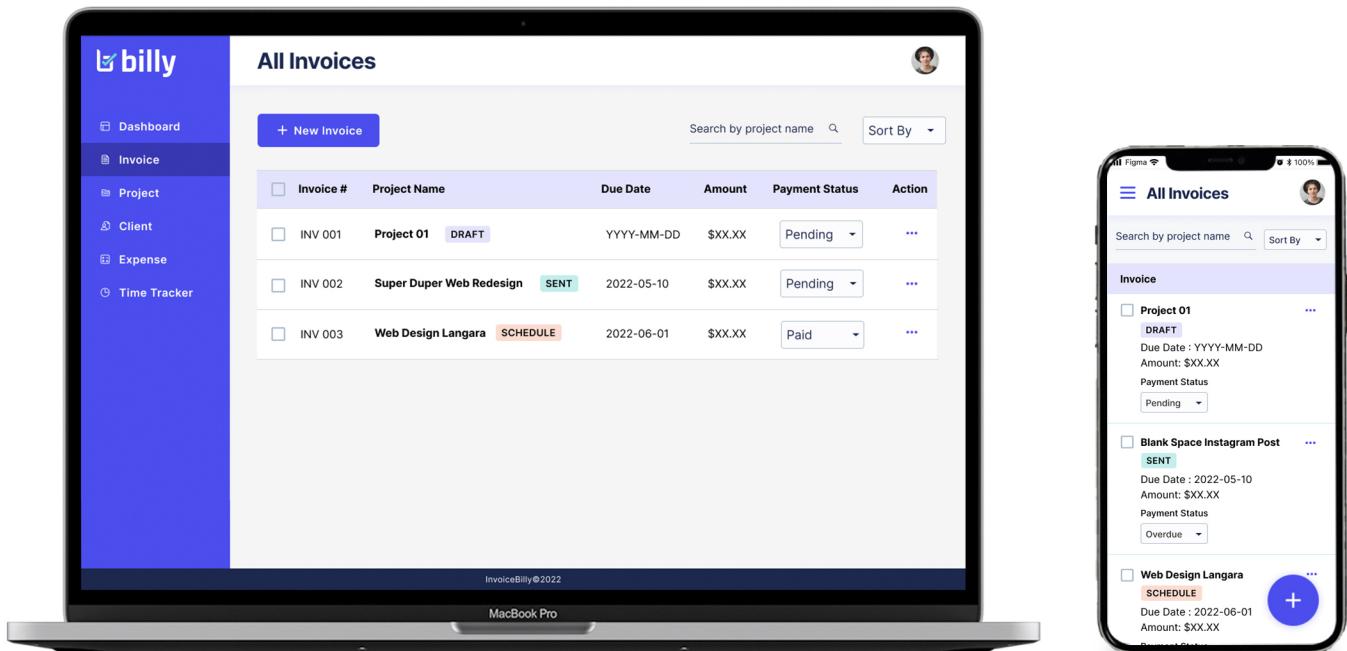
All Invoice

Invoice #	Project Name	Due Date	Amount	Payment Status	Action
INV 001	Project 01 draft	YYYY-MM-DD	\$XX.XX	Pending	...
INV 002	Blank Space Instagram Post sent	2022-05-10	\$XX.XX	Overdue	...
INV 003	Web Design Langara schedule	2022-06-01	\$XX.XX	Paid	...

Duplicate
Edit
Delete
Download

All Invoice

Invoice	Action
Project 01 draft	...
Blank Space Instagram Post sent	...
Web Design Langara schedule	...



All Invoices

Invoice #	Project Name	Due Date	Amount	Payment Status	Action
INV 001	Project 01 DRAFT	YYYY-MM-DD	\$XX.XX	Pending	...
INV 002	Super Duper Web Redesign SENT	2022-05-10	\$XX.XX	Pending	...
INV 003	Web Design Langara SCHEDULE	2022-06-01	\$XX.XX	Paid	...

Laptop View (New Invoice Detail):

- Logo:** Logo icon.
- Navigation:** Dashboard, Invoice (selected), Project, Client, Expense, Time Tracker.
- Invoice Section:**
 - Invoice Number: INV001, Invoice Date: YYYY-MM-DD.
 - Project Name: Select Project, Due Date: YYYY-MM-DD.
- Items Section:**

Description	Quantity	Price	Amount
More Description	Hour or pcs	\$ 00.00	\$ 00.00

+ Add New Field
- Additional Expense Section:**

Expense	Description	Amount
Domain Hosting	Domain and hosting for 12 months subscription	\$ 100.00

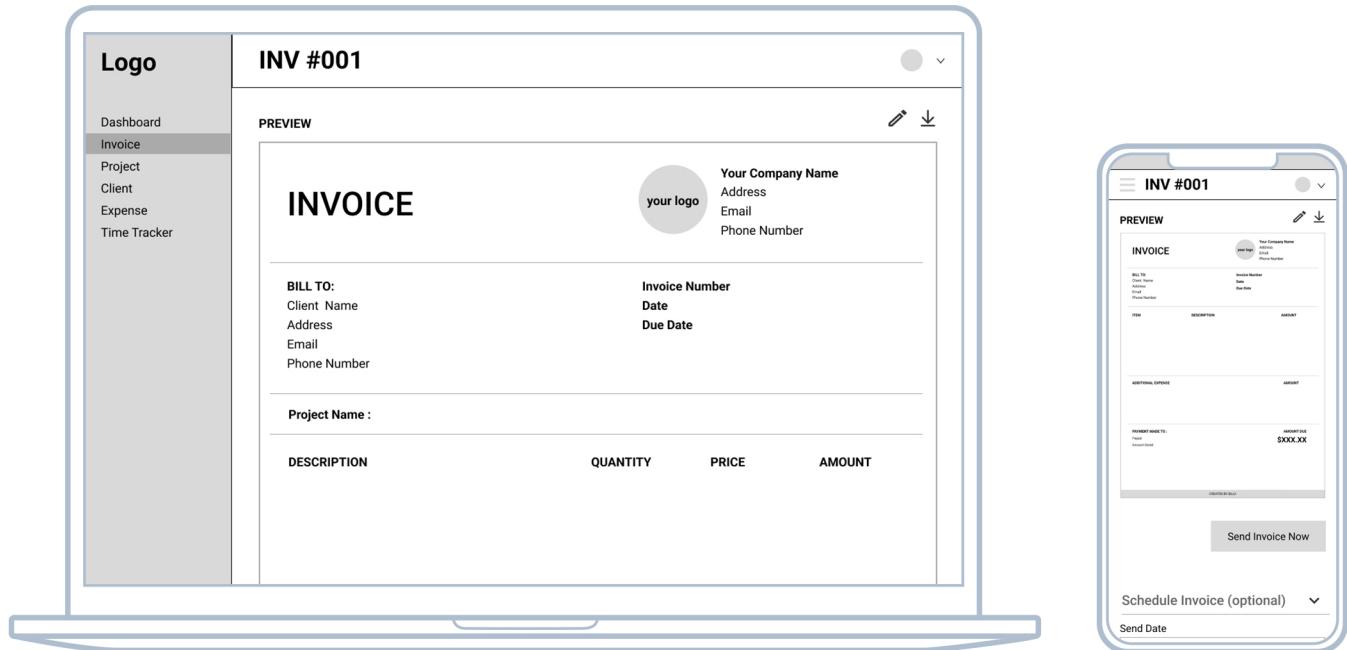
+ Add New Field

Mobile Phone View (New Invoice Simplified):

- Invoice:** Fields for Invoice Number, Invoice Date, Project Name, Due Date.
- Items:** A dropdown menu.
- Additional Expense:** A dropdown menu.
- Bill To:** A dropdown menu.
- Payment Option:** A dropdown menu.
- Amount Due:** A dropdown menu.
- Notes:** A dropdown menu.

Tablet View (Dark Mode):

- Invoice:** Fields for Invoice Number, Invoice Date, Project Name, Due Date.
- Items:** A dropdown menu.
- Additional Expense:** A dropdown menu.
- Bill To:** A dropdown menu.
- Payment Option:** A dropdown menu.
- Amount Due:** A dropdown menu.
- Notes:** A dropdown menu.



Laptop Preview:

INV #001

PREVIEW

INVOICE

Your Company Name
Address
Email
Phone Number

BILL TO:
Client Name
Address
Email
Phone Number

Invoice Number
Date
Due Date

Project Name :

DESCRIPTION	QUANTITY	PRICE	AMOUNT
-------------	----------	-------	--------

Mobile Preview:

INV #001

PREVIEW

INVOICE

Your Company Name
Address
Email
Phone Number

BILL TO:
Client Name
Address
Email
Phone Number

Invoice Number
Date
Due Date

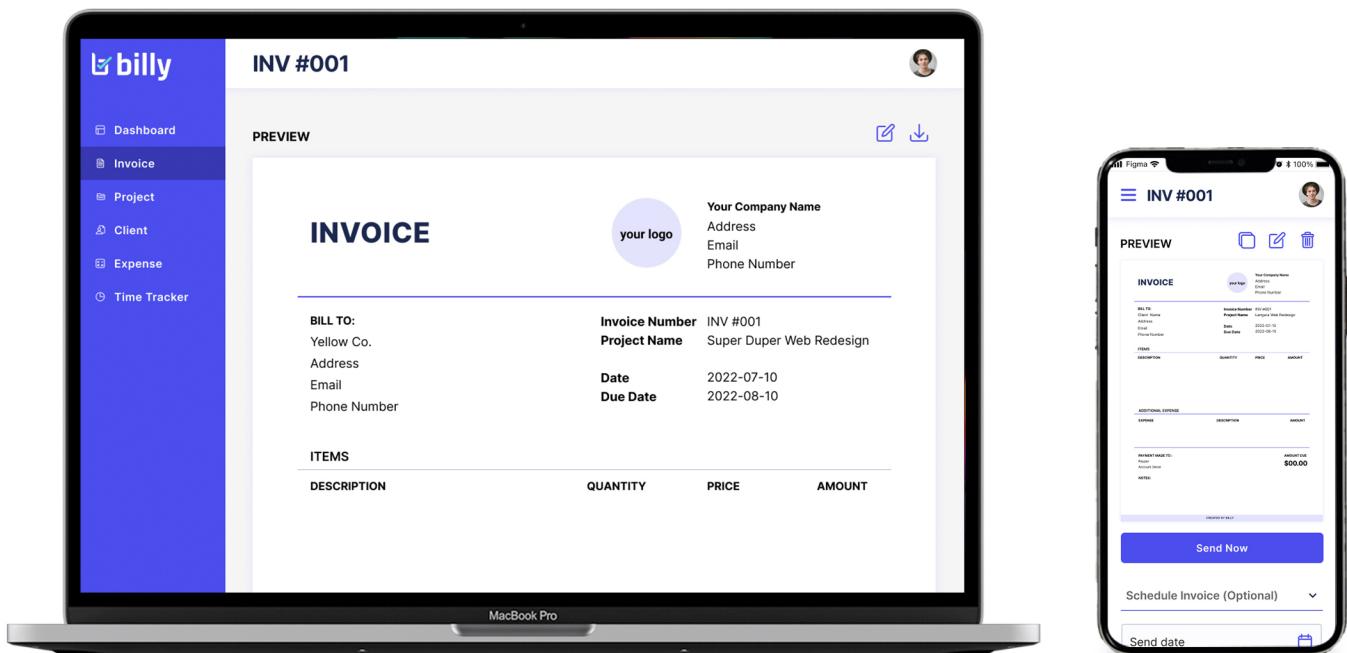
ITEMS

DESCRIPTION	QUANTITY	PRICE	AMOUNT
-------------	----------	-------	--------

PAYMENT MADE TO:
Bank
Account Name
Amount Due: \$XXXX.XX

Schedule Invoice (optional)

Send Invoice Now



billy

INV #001

PREVIEW

INVOICE

Your Company Name
Address
Email
Phone Number

BILL TO:
Yellow Co.
Address
Email
Phone Number

Invoice Number INV #001
Project Name Super Duper Web Redesign

Date 2022-07-10
Due Date 2022-08-10

ITEMS

DESCRIPTION	QUANTITY	PRICE	AMOUNT
-------------	----------	-------	--------

MacBook Pro

Mobile Preview:

INV #001

PREVIEW

INVOICE

Your Company Name
Address
Email
Phone Number

BILL TO:
Client Name
Address
Email
Phone Number

Invoice Number INV #001
Project Name Super Duper Web Redesign
Date 2022-07-10
Due Date 2022-08-10

ITEMS

DESCRIPTION	QUANTITY	PRICE	AMOUNT
-------------	----------	-------	--------

PAYMENT MADE TO:
Bank
Account Name
Amount Due: \$00.00

Schedule Invoice (Optional)

Send Now

Business Plan

Competitive Advantage

- One-stop stress-free invoicing solution
- Overview of Invoices with status details
- Time tracker and data visualization for cash flow.

Customer Segment

- Freelancer
- Small business owner with limited invoice managing tool

Key Metric

- Number of user
- Number of generated invoices

Business Model

FREEMIUM MODEL - PAY TO UPGRADE

Users can sign up a free account and have access to create a limited amount of invoice. Once the quota is reached, users are able to pay \$10/month to upgrade to premium.

With premium services, users have unlimited amount for invoice creation and they also have access to select invoice template, log work hour, track expenses, create customer records, view performance in Dashboard and the advertisement will be hidden for premium accounts.

PRODUCT IS FREE, REVENUE IS FROM ADVERTISERS

After getting numerous customers, it would attract business and the revenue will be gained from advertising.

Meet the Team



Gabriel Gimenes PM / Front-end Developer

Responsibilities: Act as a facilitator for the team meeting and decision making. Provide assistance to the other developers on frontend and backend.

<https://www.linkedin.com/in/gabrielcgimenes/>



Ashim Karki Full-stack Developer (Lead)

Responsibilities: Oversee development in the team. Develop and maintain backend aspect of the application. Architect the project structure, create REST API endpoints. Maintain database functionality and collaborate with front-end devs for feature implementation.

<https://www.linkedin.com/in/ashim-karki/>



Luisa Rueda Full-stack Developer

Responsibilities: Develop API endpoints, frontend user interfaces and integration between them. Collaborate on database structure design and CI configuration for backend project.

<https://www.linkedin.com/in/luferueda/>



Karen Garcia Full-stack Developer

Responsibilities: Componentization of the user interface. Frontend and backend integration. Ensure the responsiveness of the application.

<https://www.linkedin.com/in/karengarciam/>



Mita Trisnodjojo Graphic & Product Designer (Lead)

Responsibilities: Oversee graphic and UI/UX design in the team. Involve in all aspects of the design process. Ideation and visual designing of branding identity, design system, and user interface design. Finalize wireframe, mockups, and proposal.

<https://www.linkedin.com/in/paramitatrismodjojo/>
www.hellomita.com



Karen Chiu Product Designer - UX

Responsibilities: Conduct user research, write user stories, build user flow with user-centered approach, design wireframe, annotation to high fidelity prototype, plan business model.

<https://www.linkedin.com/in/karenkwchiu/>



Dexter Bolasoc Product Designer - UI/UX

Responsibilities: Collaborate with the team to create user-centered design. Involve in the overall user-experience research and design process (wireframe, mockups, UI prototype), branding, slide deck and photography.

<https://www.linkedin.com/in/dexterbolasoc/>



Milly Tsou Product Designer - UI/UX

Responsibilities: Collaborate with the team to create user-centered design. Involve in the overall user-experience research and design process (wireframe, mockups), and creating proposal draft.

<https://www.linkedin.com/in/yi-tien-tsou-21aaaa240/>

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