Clients.

Web-App :
1. ReactJs
   - builds eye-catching user friendly UX/UI with CSS knowledge
   - allows Creation of reusable Components for Consistancy
   - Achieves faster rendering with its virtual DOM
   - Helps with maintaing Components states throughout the process of the application
   - Same Code Can be adopted for usage on mobile app with react-native.

Mobile-App :
2. React-Native.
   - Reusing of base code

Back end :
3. Django
   - Promotes rapid development with its concise ORM functionality
   - Envokes MVC like infustructure + architecture.
   - Easily expandable project using apps.
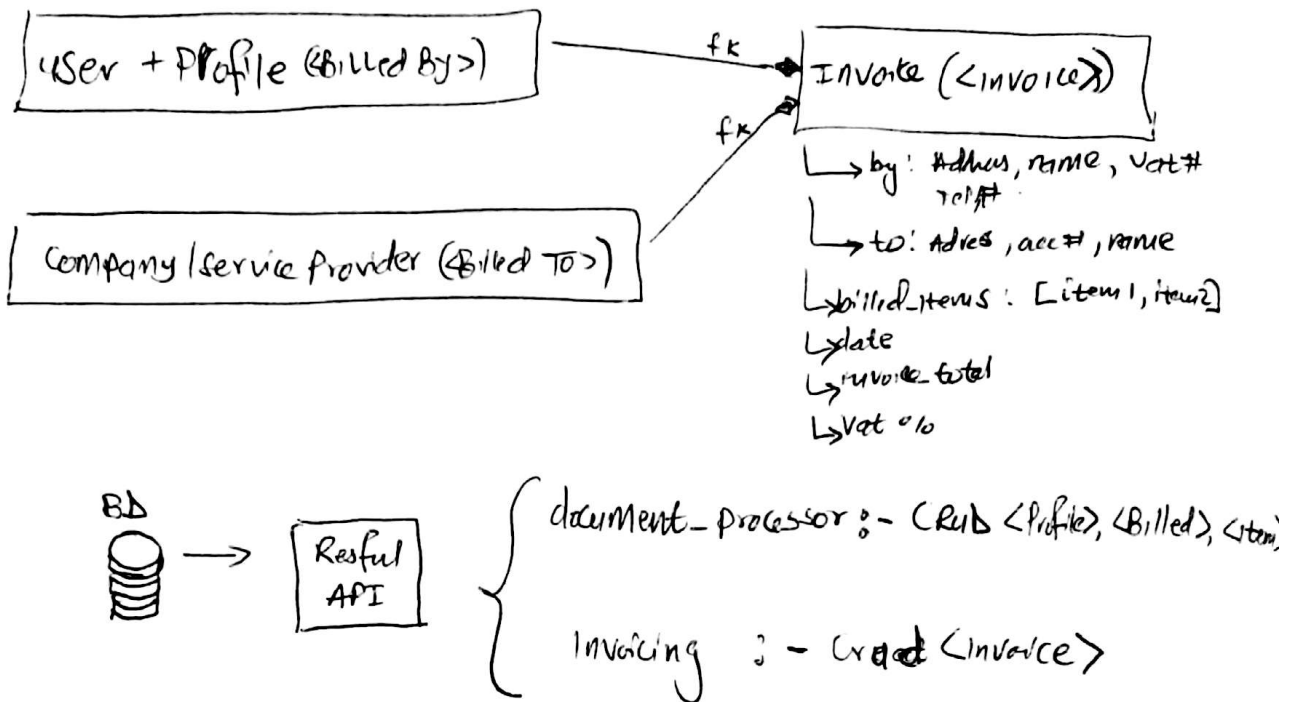   - Easy regex-based routing.

4. Resful-framework
   - Out-of-the-Shelf serialization
   - out-of-the-Shelf Crud Implementation
   - Standalone test form environment for every endpoint (browsable API)
   - Multiple response formats

Solution Concept

• New Invoice Processing Service

Micro-Service Architecture

```
┌─────────────────────────────────┐         fk      ┌──────────────────────┐
│ User + Profile (<Billed By>)    │─────────────────▶│ Invoice (<Invoice>)  │
└─────────────────────────────────┘         fk      └──────────────────────┘
                                                        └▶ by: Adhres, name, Vat#
┌─────────────────────────────────┐                        Tel#
│ Company/Service Provider        │───────────────────────└▶ to: Adres, acc#, name
│ (<Billed To>)                   │                       └billed_items: [item1, item2]
└─────────────────────────────────┘                       └date
                                                          └invoice total
                                                          └Vat %
```

BD → [Restful API] { document_processor :- CRUD <Profile>, <Billed>, <item...

                      Invoicing :- Creat <Invoice>

Restful API : Django 2.1 + Django-rest-framework

- Lated version
- Out-of-the-box Serialization and routing

Document Processing

• Generate invoice pdf dynamically from html template
• Read + extract uploaded pdf invoices (multiple) + capture details
  to create DB entries.
  - Create directory to upload invoices to and batch process them as
    a Cron job or Supervisor job in intervals, while removing
    old uploads. (Multi processing)