# COMP 3004 - Deliverable #2 - Prototype Demo
## `Brackit` - Mobile Tournament Bracket Creation

## Metadata

### Team / App Name: `Brackit`

**Team Member Names:**
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## Functionality Demonstrated

### Real

1. User Registration

2. User Login and Authentication

3. (Manual) Tournament Creation

   - Demonstrates the correct implementation of Double Elimination Bracket Creation
   - Automatically generates Rounds and Matches within said bracket

## Status Report

### Current Progress

1. Initialized logic to allow automatic migartion of database models using `Flask-migrate`

   - Enables quick iterations over constantly changing user Models; Easier backend development;

2. Created `SQLAlchemy` models for `User`, `Tournament`, `Bracket`, `Round`, and `Match` entities.

   - `SQLAlchemy`'s Object Relational Mapper (ORM) enables seamless integration of Python Classes with SQL

### Difficulties

1. SQLAlchemy does not natively support `json`ification of user-defined models (required for Restful-API)

   - Resolved by using deserialization functionality provided by Flask-Marshmallow

### Overview of Upcoming Month

# Brackit - Component Diagram

User Info,
History

Tournament
Info, History

SQLAlchemy

Brackit
Database

QR Reader

Client
Android
Phone

Tournament Bracket

Tournament Registration

Tournament Creation

Tournament
Progression
Handling